IMP. BUR.
2 9 NOV. 1922
ENTOM.

S. R. A.—Fed. Hort. Bd. 72. Issued October 27, 1922.

UNITED STATES DEPARTMENT OF AGRICULTURE.

FEDERAL HORTICULTURAL BOARD.

C. L. MARLATT, *Chairman;* W. A. ORTON, GEO. B. SUDWORTH, W. D. HUNTER, KARL F. KELLERMAN. R. C. ALTHOUSE, *Assistant to the Chairman.*

SERVICE AND REGULATORY ANNOUNCEMENTS.

January–June, 1922.

CONTENTS.

Page.

Quarantine and other official announcements ... 3
Nursery stock, plant, and seed quarantine (No. 37):
Press notices of conference on Quarantine 37—
Call for conference ... 3
Plant conference postponed ... 3
Plant conference—explanatory statement ... 3
Plant conference again postponed ... 4
Plant conference meets Monday (May 15, 1922) ... 4
Statement in explanation of Quarantine 37 presented by the Chairman at the opening of the conference ... 5
Plant-quarantine conference ends (press notice) ... 17
Better understanding results from quarantine conference (press notice) ... 19
Report of advisory committee appointed by Secretary Wallace on plant quarantine conference (press notice) ... 22
Circular letters of information re Quarantine 37—
A quarantine bugaboo laid to rest (HB–143) ... 23
Importation under regulation 2, Quarantine 37, of "plant products" in a live state, other than the classes specifically enumerated, are subject to restriction (HB–144) ... 25
Is Quarantine 37 a plant embargo? (HB–145) ... 26
Violation of plant quarantine No. 37 (HB–149) ... 29
Brief notes on pests intercepted on foreign plants offered for entry (HB–150) ... 29
European restrictions on the entry of plants from America (HB–151) ... 36
Plant-inspection requirements of England and Wales (for information of State inspectors) ... 39
Holland proposes to revise her rules governing plant exports ... 40
Mail importations of special permit material:
Conditions governing importation by mail of plants under special permits ... 41
Importation by parcel post of certain plant material under special permit of Department of Agriculture ... 42
Questionnaire re bulbs being grown in this country ... 43
The pink bollworm:
Revised rules and regulations supplemental to Notice of quarantine No. 52 ... 44
Press notice ... 53
Texas regulations ... 54
Supplementary appropriation for eradication (second deficiency act, fiscal year 1922) ... 56
Report on scouting for, crop of 1921 ... 56
Compensation on account of noncotton zones—joint resolution of Congress and regulations ... 63
Regulations for reimbursing States for noncotton zone expenses ... 63
Press notice ... 64
Report on cleaning of cotton fields in eradication of pink bollworm, 1917–1921, inclusive ... 64
Scouting program for the 1922 crop ... 66
Release of cotton samples after fumigation (HB–142) ... 68

Quarantine and other official announcements—Continued.
Page.
The white pine blister rust:
Blister rust quarantine violations—policy of the department (HB–148) 69
Quarantine on account of, in the State of Washington (No. 54) 70
Press notice 71
State of Washington quarantine order No. 7 71
The European corn borer:
Second revision of Notice of quarantine No. 43 72
Press notice 76
The gipsy moth and brown-tail moth:
Modification of quarantine (regulation No. 3 further amended) 77
Press notice 79
Letter to Secretary of State re cleanup in Cuba account citrus black fly 80
Potato regulations, revised 81
Press notice 86
Amendment No. 1 to revised regulations 87
Press notice 88
Sand, soil, or earth from Territories of Porto Rico and Hawaii:
Notice of public hearing 88
Press notice 89
Utah provides for inspection of mail shipments of plants and plant products 89
Instructions to customs officials:
Mail importations of broom corn, nursery stock, plants, and seeds prohibited 90
Instructions to postmasters:
Re Japanese beetle quarantine (No. 48, revised) 90
Re European corn borer quarantine (No. 43, revised) 91
Re satin moth quarantine (No. 53) 92
Re authority for inspection en route of parcel-post packages of plant material to detect violations of blister rust quarantines 93
Re white pine blister rust quarantine (No. 54) 94
Re prohibition of importation of cotton through the mails 94
Shipment of Mexican citrus fruit in bond through the United States (HB–147) 94
Memorandum regarding use of the telegraph 97
Convictions for violations of plant quarantine act 97
List of current quarantine and other restrictive orders 99

QUARANTINE AND OTHER OFFICIAL ANNOUNCEMENTS.

NURSERY STOCK, PLANT, AND SEED QUARANTINE (NO. 37).

PRESS NOTICE OF CONFERENCE ON QUARANTINE 37.

CALL FOR CONFERENCE.

FEBRUARY 10, 1922.

A conference is called by the Federal Horticultural Board at the United States Department of Agriculture, Washington, D. C., March 15, 1922, at 10 o'clock a. m., for the purpose of considering the advisability of any modifications—additions to or deductions from—of the classes of plants permitted entry under permit for immediate sale under regulation 3 of Quarantine 37. Such conference will afford opportunity for a full and free discussion of the whole subject of the classes of plants involved and the restrictions enforced under this regulation.

Regulation 3 now provides for the entry of certain classes of bulbs, representing 80 to 90 per cent of the importations into the United States prior to the quarantine, and also of stocks, cuttings, and scions of fruit, rose stocks, and seeds of fruit, forest, ornamental, and shade trees, and hardy shrubs. The purpose of the conference, therefore, is to consider the desirability of any restrictions in this list of plants or additions to it. Under this regulation open continuing permits are issued for the plants listed. In other words, there is no limitation on the number of plants which may be imported under such permits.

PLANT CONFERENCE POSTPONED.

FEBRUARY 17, 1922.

The conference on plant quarantine called to meet here March 15 has been postponed until April 19, the Federal Horticultural Board, United States Department of Agriculture, announced to-day. The first date, it was found, conflicted with important national and international flower shows scheduled for the latter part of March, thus preventing many florists and horticulturists from attending.

The conference will meet at the offices of the board here at 10 o'clock, April 19, for the purpose of considering the advisability of any modifications—additions to or deductions from—of the classes of plants permitted entry under permit for immediate sale under regulation 3 of Quarantine 37. Opportunity will be afforded for full and free discussion of the whole subject of the classes of plants involved and the restrictions enforced under this regulation.

PLANT CONFERENCE—EXPLANATORY STATEMENT.

MARCH 2, 1922.

Recent correspondence indicates that the call for a conference April 19, 1922, to discuss the classes of plants to be admitted under the limitations established in regulation 3 of Quarantine 37 is not clearly understood.

Since the establishment of Quarantine 37 the classes of plants included under regulation 3 have been criticized as either including too much or not enough; in other words, the criticisms have been of such contradictory character as not to warrant making any changes in the operation of the quarantine.

The board has, however, repeatedly announced that it was ready at any time to confer with propagators and also importers to consider any additions

to the classes of plants included under regulation 3 which could be shown to be justified and reasonably safe. The board has given hearings also to two foreign delegations; one from Belgium last May and the other from Holland last June, and promised them that a conference on the general subject of regulation 3 would be held some time during the present year. The call for the conference recently issued is, therefore, in response to individual requests and carries out the promise to these foreign delegates.

As representing another phase of the subject, during the past season the infestation of fruit and rose stocks has been unusually heavy with larval nests of the brown-tail moth and also with similar but much smaller larval nests of an insect new to the United States, which might very possibly prove to be a serious enemy to the horticulture of this country. In spite of repeated warnings to European shippers, the condition in this respect of imported stocks does not appear to be improving, and it becomes necessary to consider what further steps should be taken to protect the country from the entry of these and other pests in connection with the importation of such stocks.

The board does not feel that at the present time it has sufficient information to warrant making any changes in the classes of plants included in regulation 3, but hopes to secure from this conference information that will clearly justify action on one or more of the following propositions: (1) The continuation of the classes now in regulation 3; (2) the need, if any, for restricting the classes of plants now included in this regulation; and (3) the need, if any, of adding to the classes of bulbs or plants under this regulation.

Except as outlined above, the board has no program, drastic or otherwise, of changes in regulation 3 in mind, and has merely opened the subject in response to requests for free and full discussion. There is no thought of weakening in any material way the protection which the quarantine now gives, but it is possible that some minor amendments can be made without risk.

C. L. Marlatt,
Chairman, Federal Horticultural Board.

PLANT CONFERENCE AGAIN POSTPONED.

March 11, 1922.

The conference on plant quarantine, originally called to meet March 15 and postponed, at the request of the Society of American Florists and Ornamental Horticulturists, to April 19, has been again postponed until May 15. The second postponement is made at the request of the President of the American Association of Nurserymen, who represents that the month of April is the one season of the year when the nurseryman must be on his job to get out his orders and do his planting. The new date has been referred to the president of the Society of American Florists and Ornamental Horticulturists and has been approved by him.

PLANT QUARANTINE CONFERENCE MEETS MONDAY [MAY 15, 1922].

May 13, 1922.

Whether it is possible to modify the restrictions now being enforced with respect to the importation of foreign bulbs and plants without materially increasing the risk of entry of pests and diseases will be considered at an important conference to be held by the United States Department of Agriculture here Monday [May 15, 1922]. Leading nurserymen and florists from practically all parts of the country, as well as many State officials and other interested persons, will be present.

No formal program for the proceedings of the conference is planned and opportunity will be afforded for full and free discussion. Discussion will center about regulation 3, which provides for the entry of certain classes of

bulbs, stocks, cuttings, and scions of fruits, rose stocks, and seeds of fruit, forest, ornamental and shade trees, and hardy shrubs. The conference will consider the desirability of any restrictions in this list of plants or additions to it. Under this regulation open continuing permits are issued to all applicants for the plants listed, with no limit on the number of plants that may be imported.

Provision is now made for the entry under special permit of any plant not included under regulation 3 for the purpose of keeping the country supplied with new varieties and necessary propagating stock, or for any other scientific or technical purpose, but such importations are strictly limited to these needs. The question will come up for consideration at the conference whether any of these plants now subject to the limitation indicated can be safely brought in under the unlimited entry provisions of regulation 3, or whether any plants now under regulation 3 should be transferred to regulation 14 for restricted entry to meet merely introduction and propagating needs.

Before the Federal quarantine went into effect in 1912, many insect pests and plant diseases that yearly cause millions of dollars damage were unwittingly brought into the United States from various countries. No important plant pest is known to have gained entry and become established in this country since the enforcement of this quarantine, although many thousands of such pests have been intercepted.

STATEMENT IN EXPLANATION OF QUARANTINE 37 PRESENTED BY THE CHAIRMAN AT THE OPENING OF THE CONFERENCE, MAY, 15, 1922

For the information of the conference there is presented herewith an analysis of the general subject which is before it for consideration; namely, the necessity, if any, of modification of the classes of plants permitted entry under regulation 3 of Quarantine 37, either as to additions or deductions. This portion of the circular amounts merely to a statement of the problem, leaving the decision as to future action to follow any constructive suggestions which may develop at the conference. There is, however, included in subsequent pages of this circular a discussion of a number of subjects which have a direct bearing on Quarantine 37 and its administration.

The subjects included in this circular are indicated below:

	Page.
Purpose of conference	6
Constructive suggestions wanted	6
Basic principles of Quarantine 37	6
All importations involve risk	6
Provisions for plant importations	7
Classes of plants open to unlimited importation	7
The bulb subject	7
Fruit stocks, etc	7
Rose stocks	8
Other ornamentals	8
Steps leading to the conference	8
Selective features, the real difficulty with Quarantine 37	10
Reasons for restrictions on issuance of special permits to amateurs	11
Designation of new varieties	12
Amendments to the plant quarantine act	13
Plant importations—Policy of the department	13
Record of conferences and discussion afforded prior to promulgation of Quarantine 37	15
The Federal Horticultural Board—Its function	16

Purpose of Conference.

In the first place, as the call indicated, this is a conference of the interested public with this department and not a formal hearing under the plant quarantine act.

Constructive Suggestions Wanted.

As has been frequently stated, this department has no program of recommendations, but has asked you to come together to discuss the advisability of any modifications of the classes of plants permitted entry under permit for immediate sale under regulation 3 of Quarantine 37, either as to additions or deductions, and hopes from this discussion to secure from the conference information that will clearly justify the existing status or indicate necessary changes.

To give some direction to the discussion, however, it seems desirable to state the case.

Basic Principle of Quarantine 37.

Fundamental to this conference and to Quarantine 37 and to the protection of the country from the entry of new pests is an understanding and we hope acceptance of the general principle on which Quarantine 37 is based. This principle has been variously stated, but it is fairly well expressed in the following wording, which has been widely exploited and often criticized:

> The general principle underlying Quarantine 37 is as rapidly as possible to make this country independent of foreign supplies, with the object of ultimately reaching a condition where entry of foreign plants will be limited to new plants and to such plants as are not capable of production in the United States.

Wherever this or similar statements have been used in pronouncements by this department the context has plainly indicated that this policy had the single object of reducing the risk of further entry of dangerous plant pests.

All Importations Involve Risk.

The quarantine recognizes the fact that any importation of plants is attended with a risk of bringing in new enemies. Some of the worst pests have come in with very insignificant importations. A single trivial importation of Japanese iris brought in the Japanese beetle; a few Japanese flowering cherry trees introduced the oriental fruit worm; the San Jose scale was brought in, in like manner, with a small importation of Chinese flowering peaches; a very unnecessary importation from Holland of blue spruce—a native American tree—established the gipsy moth widely in New Jersey; the brown-tail moth was introduced through an importation of roses, probably from Holland or France; and an importation of seedlings of the American white pine, propagated in Germany, introduced the pine blister rust, which now threatens to wipe out our white pine forests. The chestnut blight, similarly introduced with a trivial importation of oriental chestnut trees, very possibly to complete some collection of the chestnuts of the world, bids fair to rapidly exterminate the native American chestnut, which has hitherto constituted a very considerable element of the forests of the eastern half of the United States.

To illustrate the rapidity with which such plant enemies were coming into the United States, it may be noted that during the period of four years (1909–1912), which it took, on account of opposition, to secure this legislation, the following pests of major importance secured entry and became established, namely, the oriental fruit worm, Japanese beetle, citrus canker, potato wart, and European corn borer.

No important pest is known to have become established in the United States since the passage of the act.

Provisions for Plant Importations.

Circular Letters 105 and 145, which are available here and which probably most of you have seen, point out the provisions for unrestricted entry of certain classes of seeds and plant products under regulation 2 of the quarantine, of unlimited entry as to quantity or importer of certain other classes of plants under regulation 3, and of entry restricted only to the necessities of introduction, propagation, or experimental or scientific needs of all other classes of plants under regulation 14; in other words, provision for the entry of any necessary or useful plant whatsoever in quantities sufficient to meet any reasonable need.

Under regulation 14, therefore, any unavailable plant may be imported in any quantity which is reasonable for the establishment of reproduction plantings on any legitimate commercial scale or for entry of any new varieties or for any plants which may be necessary for experimental or scientific purposes. Except as to introductions for technical purposes, it is anticipated that the plants introduced will be multiplied and increased so that ultimately further introductions of these particular varieties will be unnecessary; in other words, that there will be a gradual reduction in the need for importations and of the attendant risk of new enemies.

The quarantine, however, recognizes the need of a door perpetually open to new varieties and to any other plants which are not capable of production in the United States.

Classes of Plants Open to Unlimited Importation.

Taking up the main subject of this conference, namely, the various classes of plants now included under regulation 3, there are five items under this regulation, but perhaps only three of them need to be seriously considered at this time, namely, the items of bulbs; fruit stocks, cuttings, buds, etc.; and rose stocks. Fruit and tree seeds are not involved so far as this department is concerned. Some risk, known in some instances and unknown as to others, attends the importation of such seeds, but such risk can in large part be eliminated by disinfection or, where necessary, by holding and propagating under quarantine.

The Bulb Subject.

With respect to bulbs, any change in that schedule should be based on availability, and this factor should govern both in the matter of additions to the list or to deductions therefrom. With respect to the bulb item, the department merely wishes to be advised and to act justly on the facts of the situation.

Fruit Stocks, Etc.

The subject of American production of fruit stocks is not a new one. It has been seriously debated in recent years by nursery interests, and, at the request and with the support before Congress of these interests, a Federal appropriation of $20,000 was secured in 1920 and has since been continued to investigate the subject. This purpose is plainly indicated in the wording of the appropriation, as follows:

> For investigating, in cooperation with States or privately owned nurseries, methods of propagating fruit trees, ornamental and other plants, the study of stocks used in propagating such plants, and methods of growing stocks, for the purpose of providing American sources of stocks, cuttings, or other propagating materials, $20,000.

It is, therefore, desired to take stock of this work and to determine, so far as is now possible, a program for the future.

That there is a large risk in connection with the importation of fruit stocks, and also rose stocks, has been strikingly demonstrated, particularly during the last two seasons. In the case of both of these stocks now permitted unlimited importation, there has been during these years an unusually heavy infestation with the larval nests of the brown-tail moth and also with the similar but smaller larval nests of the white tree pierid, an insect new to the United States, which may very possibly prove to be a serious enemy to the horticulture of this country. Most of this infestation has been on French stock and, in response to a second and serious presentation of the case to the French inspection authorities, this department has been advised that important changes have been made in the inspection service of that country and assurances have been given that every effort will be made to eliminate any future cause for such complaint.

Rose Stocks.

As to rose stocks, these, at the time of the hearing in 1918, preliminary to the quarantine, were represented by prominent rose growers of the country as a necessity for the time being at least. Since the promulgation of the quarantine many prominent rose growers and experts have advised the department that the inclusion of rose stocks under regulation 3 was unnecessary and an error, and that rose stocks could be produced in this country as well as abroad, and that the risk from the entry of this class of importations could be and should be eliminated. The board wants this subject, therefore, discussed and wishes the advice of the rose interests on the matter.

Other Ornamentals.

I have already pointed out that the department believes that regulation 14 will meet the introduction needs of ornamental plants, both herbaceous and woody, but if any such ornamentals can not be produced in this country with the ample provisions made for the entry of propagating stock, it is proper and desirable that such items should be brought up for discussion at this time for inclusion under the conditions of regulation 3.

This analysis covers the general subject for your consideration and, as already indicated, the department hopes to secure from the conference constructive suggestions as to desirable changes which can be made without material increase of the risk of entry of pests.

There is, however, included in subsequent pages of this circular, drafted for the information of the conference, a discussion of a number of subjects which have a direct bearing on Quarantine 37 and its administration.

Steps Leading to the Conference.

Such a conference as the one now called has been under consideration for a long time, and, in fact, was suggested by the chairman of the Federal Horticultural Board in August, 1919, in his address before the Society of American Florists and Ornamental Horticulturists at its annual session of that year in Detroit, as indicated by the following extracts taken from the shorthand report of the convention published in the American Florist and in other florist journals:

> We are perfectly willing to correct anything in the quarantine that is unnecessary, and the bulb matter may be one of those.
>
> We will be glad to have your bulb men come in committee or conference at any time at Washington. We would like to go over the whole subject of bulbs, because if there is any weak spot in the quarantine it is in the matter of bulbs.

In the same connection, referring to the subject of orchids, he said:

> We will be glad to receive a delegation with whom we will go over that matter. As to orchids, we acted on information from our expert advisers. If there has been a mistake there, it can be corrected.
>
> This quarantine is not necessarily final, but it is final in my judgment as to the main lines or recommendations.

The orchid interest, or rather a faction of it, after various failures to reach an agreement with the opposing faction, asked for a conference, which was promptly granted. The division of opinion continued at this conference, fully half of the attendance strongly supporting the quarantine features as they stood and the other half objecting to them, but practically all admitted in the end that under the provisions for entry of necessary propagating stock, production of orchids from seed or otherwise in this country was entirely possible. There seemed to be no justification, therefore, for any change in the orchid item.

No action by the bulb interests was, or has been, taken as to the suggested conference. The board, however, held two conferences in September, 1919, with the bulb experts of the Bureau of Plant Industry of this department and, while the general feeling was that no change in the quarantine as to this item was necessary or desirable, at the request of the board, a call for a public conference was drafted by the Bureau of Plant Industry. This call was not immediately issued, and in the meantime the information coming to the board from various sources indicated a lack of public interest in the subject. In other words, the possibility of importing the restricted bulbs under special permit for the establishment of bulb farms in this country had been so liberally and widely taken advantage of that it was thought that the announcement of a conference by the department without special outside demand would have an unfortunate effect on the public confidence in the stability of the quarantine and on the existing very large development of home production.

In May and June, 1921, delegations respectively of Belgian and Dutch horticulturists discussed with the board particularly bulb importations and were promised that a public conference on the subject would be called at some future date. After further discussion with the experts of the Bureau of Plant Industry of the department the board determined to call the conference early in 1922 but decided to open for discussion the whole subject of plant importation under Regulation 3. The reasons for the various changes of date of the conference have been indicated in the announcements.

The board has held other conferences relative to Quarantine 37, publicly announced or by request of special groups, and action favorable to the conferees has been taken several times following such conferences. As indicated above, the board has always welcomed such conference and no requests of that kind have ever been refused.

As indicating the policy of the board and department concerning any future changes in the quarantine, there is quoted below a portion of a letter written to the editor of the Florists' Exchange January 4, 1922, and published in that journal and in other trade papers. This letter was called forth by rumors, for which the board was not responsible, that additional restrictions were contemplated with respect to the entry of bulbs and other classes of plants listed under regulation 3 of Quarantine 37. This statement pointed out that no formal action had been taken by the board and that if any action were to be taken in the future it would be after open conference on the subject and with the intention to give ample time—years if necessary—for readjustment, as indicated in the following quotation from the letter:

> If, as a result of such conference, it should be determined to be desirable to still further restrict entry of such articles, before such restrictions are enforced

ample time will be given for any necessary readjustments, both with respect to the home and foreign growers of such plants. In other words, the notice to foreign growers will be such as will be deemed adequate to meet the new conditions and restrictions, if any, dependent on the character of the plant concerned—one to several years. The intention would be to give the foreign grower opportunity to curtail his production and dispose of supplies which he has already under way for the American market and at the same time to give opportunity for the American grower to prepare to meet home needs. Naturally, any such curtailment, if determined upon, will not be taken until it is clearly shown that American production can within a reasonable time replace the stock theretofore imported.

Selective Features, the Real Difficulty with Quarantine 37.

The department is enforcing 24 foreign plant quarantines and 15 domestic plant quarantines, and all of these are working as smoothly as quarantines ordinarily work, and all are accepted without serious question except Quarantine 37. It is therefore worth while to attempt to determine wherein Quarantine 37 differs from the others. A brief study of the matter, I think, makes it plain that the difficulty is due practically altogether to the selective features involved in this quarantine both as to the restrictions on the entry of foreign plants and as to the restrictions on the issuance of permits to import plants, in both instances with the object of reducing the volume of importations and consequent risk of entry of any pests and yet to provide for all essential introduction and propagating needs. These selective features are as follows:

1. As to plants, Quarantine 37 is selective in that it permits certain classes to be freely imported, and restricts the importation of other classes.

2. As to the restricted plants, it is again selective as to varieties and quantities, based on availability or need.

3. As to permittees with respect to restricted plants, it is selective on the basis of the public service to be rendered with the plants imported.

The basis of the selections exercised by this department, both with respect to plants and individuals, is indicated in the quarantine and regulations and is more fully explained in Circular Letters 105 and 145 issued by the board.

It can easily be appreciated that these selective features afford ample opportunity for difference of opinion, and this difficulty is inherent in any quarantine of this nature and could not be avoided by any change in the machinery of administration.

The records in the possession of the department fully demonstrate that importations of all classes of plants are attended with a greater or lesser risk of bringing in new enemies in spite of any practicable safeguards of inspection or even disinfection. The protection which the country needs and demands, therefore, involves the exclusion of all stock not absolutely essential to the horticultural, floricultural, and forestry needs of the United States, and that is just what Quarantine 37 attempts to do.

The only remedy which suggests itself appears to be impracticable; namely, to declare a "really and truly" embargo against the introduction of all foreign plants except as to entries made through the Department of Agriculture. Such a quarantine would not only give the most perfect protection from the entry of foreign plant pests but would probably eliminate most of the complaints because of the finality of the action. The assumption of such importations by the department, however, would seem to involve such an enormous governmental enterprise as to be unwieldy and undesirable. Unless some other and better plan, therefore, is suggested, it seems necessary to proceed with a selective quarantine, along the lines of Quarantine 37.

REASONS FOR RESTRICTIONS ON ISSUANCE OF SPECIAL PERMITS TO AMATEURS.

The policy of the board and department relative to issuance to amateurs of special permits under regulation 14 for the importation of restricted plants is given in board Circular Letters 105 and 145, which have been fairly widely distributed and published either in whole or in part in various horticultural and trade journals.

The principal objections of the amateur plant grower to Quarantine 37 come from the selective feature, already discussed, involved in the policy of the issuance of special permits for the importation of the restricted plants on the basis of the public service rendered. The amateur plant grower, more than any other group, is affected by this policy, and unfortunately, as elsewhere indicated, it furnishes a subject for complaint which seems to be unavoidable.

The department thoroughly appreciates and sympathizes with the perfectly natural desire of plant lovers and enthusiasts to import for their personal use and the adornment of their estates or gardens any new or old variety which they may wish to secure. The reasons for the restrictions on the issuance of special permits to such persons is discussed in Circular Letter 145, as follows:

The Federal Horticultural Board and the Department of Agriculture would be only too glad to meet the wishes of such persons, and their name is legion, if it were not realized that this action would practically nullify the quarantine. Persons of this general type interested in plants are found in numbers in every town and hamlet in the United States, and to permit any or all of them to import plants for personal use in such condition that they could grow them would mean not only that the plants would have to come, in many cases, in earth ready for immediate planting—involving dangers of plant pest introductions which can not be safeguarded by inspection or treatment—but that it would be absolutely impossible for this department to handle the tens of thousands of small importations which would result, or to follow them up to destinations throughout the country with any subsequent safeguards. There would rarely be any public service of real value in connection with such importations, such as making the new plants generally available or utilizing them for breeding or other work. Some essential service of this sort should be the basis for the entry of the various classes of plants which are not open to unlimited importation. The mere personal gratification of hundreds or thousands of individuals who might wish to make their own importations would be small justification for the risk of carriage of new pests to every part of the United States—a risk which would be vastly greater than before Quarantine 37 was established.

This situation led to the exclusion of importations for mere personal use or gratification and to the limitation of the issuance of special permits for the entry of new or unavailable plants chiefly to plant propagators who will agree to utilize the plants imported for the purpose of reproducing additional stocks for a period of one to five years, based on the time needed for such multiplication or reproduction. The immediate sale of plants thus imported is not permitted, but no restrictions are placed on the sale of the plants produced from the imported stock, except that the importer will be expected to maintain a sufficient supply to meet his future needs.

It is expected, therefore, that importations under regulation 14 will be largely by persons who will propagate the imported stock as a commercial enterprise, and thus perform a public service by making such plants generally available. The only exceptions are the issuance of permits to provide for the needs of botanic gardens, agricultural colleges, experiment stations, and other similar public institutions, and to those few amateurs who are widely or nationally known as maintaining collections of real merit and open to the public, or engaged in work of public benefit with the plants concerned. If such persons are not known to the experts of this department, they will be required to furnish evidence of their status.

In the event, however, that the authorized agencies, commercial or other, do not bring in varieties of plants which enthusiastic plant lovers may wish, the department has made special provision for the entry through its Office of Plant Introduction of any neglected or overlooked new varieties, and, incidentally, this office has been undoubtedly the principal agency for the importation of new plants into the United States for the last 20 years.

To recapitulate, the existing provisions for the entry of new or unavailable plants under regulation 14 include (1) all the importations which any commercial grower is willing to make, and such commercial growers include persons of world-wide recognition as plant specialists and breeders; (2) importations by botanic gardens and some hundred experiment stations and other public institutions with enthusiastic experts in horticulture and floriculture; (3) importations by the leading and recognized amateurs of the country; and (4) importations through the Office of Foreign Seed and Plant Introduction of the Department of Agriculture.

Under the plan, therefore, of Quarantine 37 it becomes necessary for persons who are neither commercial growers of plants nor amateurs who are recognized as maintaining collections of real merit or engaged in research or other work of distinct public benefit with the plants concerned—in other words, the ordinary plant lover who wants the plants for his own garden or the adornment of his own estate—to secure new varieties from home sources, and the department has endeavored, through the means enumerated, to make available such new varieties of plants under methods which involve the least risk to the horticulture and agriculture of the country.

The status as to public service of the amateur is determined as follows:

All requests for permits from amateurs who believe their collections are of real merit and of distinct service to the public, or who represent that they are engaged in work of general public benefit with the plants concerned, are first submitted to the Bureau of Plant Industry of this department for examination and recommendation, and the status of the applicants is further determined by indorsements submitted by the applicants themselves or by information obtained by the Department from all available sources.

The opportunity for criticism of such determinations is fully realized, but the board has endeavored, from the sources indicated, to secure and file data with respect to all applicants which may convince any fair-minded person of the reasonableness of the action taken.

Inasmuch as the enforcement of the plant quarantine act is specifically placed on the Department of Agriculture, it would seem that determinations of this sort, involving an appreciation of the merits and service character of the work of any amateur, are best safeguarded by being submitted for decision to the many plant experts of the Bureau of Plant Industry with their wide acquaintance with ornamental horticulture, and that such decision should be supported by all available indorsement and information obtainable from public sources or from persons closely in touch with the activities of the applicants. The gates can not be thrown wide open; otherwise, as already indicated, we would have no quarantine and no protection, but it is highly desirable to recognize the important but fairly limited class of amateurs who will perform a public service of real value with the plants imported, and this has been the policy of the board from the outset.

Designation of New Varieties.

Various questions have been asked relative to the determination by the department of new varieties for the purpose of authorizing their importation under regulation 14. At the outset the board undertook to take the word and judgment of the importer as to new varieties. But, unfortunately, it soon developed that some foreign exporters and some American importers were quite ready, and did take advantage of this liberality to import common and abundantly available stock under false designations. Many such fraudulent attempts made it necessary for the board to surround the designation of new varieties with certain safeguards, and incidentally a good many of the restrictions on the importation of plants, such as the bond, for example, and other precautions which the department has been forced to adopt, are due to just such attempts to violate the quarantine. Unfortunately, as is always the case, the innocent must be restricted and made to bear burdens on account of the guilty.

The Bureau of Plant Industry cooperates with the board in the making of all decisions relative to determination of the status of such new varieties, and all such requests are first referred to that bureau for recommendation.

This action is taken not only with respect to varieties which have been officially recognized, either abroad or in this country, as of merit, but also in the case of any new varieties which have not been so recognized. With respect to the latter the following order has been issued by the board:

To aid the experts of the department in passing on applications for special permits to import new varieties of plants which have not been officially recognized, either abroad or in this country as of merit, the board ruled that the applicant shall be required to furnish a technical description of such new variety, such as would be published in exploiting it in a florist's journal or similar publication. Where a variety has already been rejected as lacking special merit by a foreign society, before granting a permit a further statement is to be secured from the applicant as to his reasons for desiring it.

There are occasional instances when this information can not be furnished, and to meet such cases the board has authorized the issuance of permits for limited numbers of new varieties for which neither names nor numbers or other designations can be furnished in advance by the would-be-importer on the condition that the foreign grower or originator shall submit for the information of the board, with the shipment, such data as is required by the board with respect to such new varieties.

Amendments to the Plant Quarantine Act.

The plant quarantine act of 1912 has been amended three times, as follows:

March 4, 1913.—To include the second proviso to section 7, which provides for importations by the Department of Agriculture of prohibited plants.

March 4, 1917.—Various changes were made in section 8 for the purpose of making it possible to control under the act the movement of any product which might carry a pest; in other words, it was shown that quarry products, railroad ties, etc., were perhaps the most dangerous source of carriage of gipsy-moth eggs. In addition, the act was changed to make possible regional quarantines, the specific object being the possibility of quarantining the eastern half of the United States on account of the white-pine blister rust for the protection of the white or five-needle pines of the Rocky Mountain and Pacific coast ranges; in other words, to make it possible to quarantine a region irrespective of infestation throughout for the protection of any other region. Use of this amendment has been made not only in the case of the white pine blister rust, but also for the control of the black stem rust of wheat in connection with the barberry rust campaign.

May 31, 1920.—Section 15 was added to the act to provide for the control of plant movement and plant diseases in the District of Columbia. Prior to that time the District of Columbia was a sort of an oasis in the United States, without legal authority for any plant disease or pest control whatsoever.

Plant Importations—Policy of the Department.

An effort has been made to make it appear that Plant Quarantine 37 contemplates a total embargo against the introduction into the United States of "any newly discovered, rare, interesting, especially exotic, fruit or ornamental plant, whether species or hybrids." That the department has no wish or intention, now or at any future time, to make it impossible to provide for the entry under proper safeguards of any plant whatsoever for which a real need can be shown, and that ample provision has been made for such importations under Quarantine 37, will be at once apparent from an examination of the quarantine and regulations and of the records of importations thereunder.

This misapprehension as to the policy of the department is fairly plainly traceable to an exploitation of alleged sentences from official letters or publications of the Federal Horticultural Board, which by elimination of all qualifying clauses are made to indicate a meaning almost the exact opposite of that plainly conveyed by the sentence as a whole. For example, the sentence quoted below has been widely exploited, but omitting the portions which are now italicized, making it appear that a future embargo was contemplated. The complete sentence as it was issued is a perfectly proper epitomized statement of the purpose of Plant Quarantine 37, with the object of reducing to the lowest minimum of necessity plant importations and thereby lessening the risk of further entry of dangerous plant pests:

Naturally, however, the whole spirit of Quarantine 37 is to as rapidly as possible make this country independent of foreign supplies, in the hope that some day we will reach a condition where no entry of foreign plants will be necessary, *other than to make adequate introductions of new plants and perhaps, occasionally, old plants which are needed for the establishment of new propagation enterprises and which are not commercially available here.*

This principle underlying Quarantine 37 has been repeatedly stated in substantially the same terms, or at least with the same meaning, for a period well antedating the quarantine and throughout the administration of the quarantine in practically every informing document on the subject which the board has issued. It was the underlying thought in the discussions and resolutions urging the quarantine for a period of years, participated in by the official and other representatives of various State and national societies related to the development and protection of our agriculture and forestry. For example, without going back to the earlier pronouncements of the department and the various associations on the subject, the following language occurs in the statement issued by the board February 1, 1919, four months before the quarantine went into effect:

It (the quarantine) voices the belief that the policy of practical exclusion of all stock not absolutely essential to the horticultural and floricultural and forestry needs of the United States is the only one that will give adequate protection against additional introductions of dangerous plant diseases and insects.

The recognition, on the other hand, of the continuing need for the introduction of any new plants and also of other plants has been many times restated. To quote from the circular letter of February 25, 1921:

"All the pronouncements of the Federal Horticultural Board and of the department with respect to this quarantine are specific and clear and indicate no purpose whatsoever, now or at any other time, of an intention to bar any foreign plant necessary for the establishment of any new or desirable fruit or ornamental;" and "with respect to such importations the department has adopted a policy of great liberality, with the point of view that it wishes to afford every reasonable means for the introduction for the purpose indicated of any plants not now available in this country;" and special permits "will be continued to be issued with respect to any plant until the Department of Agriculture is convinced that adequate stocks are commercially available in the United States."

The authority of decision for such plant importations must necessarily have some location and the Department of Agriculture, with its important bureaus relating to plant production, is undoubtedly the best agency for making such determinations. In point of fact, however, on the presentation of evidence by any importer or grower of the unavailability of any plant necessary for propagating purposes, that is, the impossibility of securing it from commercial sources in this country, a permit has always been issued. This has happened many times, and indicates that the department's purpose in the whole administration

of the quarantine is to be of service; in other words, to render every aid possible to the horticultural development of this country and, at the same time, give such protection as is absolutely necessary against entry of new pests.

Record of Conferences and Discussion Afforded Prior to Promulgation of Quarantine 37.

Inasmuch as it has been asserted that Quarantine 37 was hastily promulgated without opportunity for conferences and came with an element of surprise to the trade and other interests involved, it seems desirable to give the facts of public record, indicating the ample opportunity afforded for consultation and conference and the publicity given to such opportunities preliminary to the quarantine, as follows:

(1) The necessity for restrictions similar to those involved under this quarantine had been the subject of discussion and recommendation by resolution over a period of several years at annual meetings of the various associations—national and regional.

(2) On the basis of such resolutions, the Bureau of Plant Industry of the Department was asked by the board for advice with respect to such proposed quarantine, and the report of that bureau recommending quarantine action was submitted to the board February 26, 1918.

(3) The notice of public hearing for May 28, 1918, for the purpose of considering such quarantine was issued March 28, 1918, two months before the hearing, and was sent to all nurserymen, permittees or otherwise, on the mailing list of the department, and was published in horticultural and trade papers.

(4) The hearing was well attended by official and other representatives of the principal trade societies related to horticulture, and with a wide State representation of technical and practical men, and the stenographic record on file indicates a practically unanimous point of view in favor of a quarantine even more drastic than the one actually later promulgated by this department.

(5) Following this hearing, the board, in cooperation with the Bureau of Plant Industry, made a thoroughgoing and country-wide investigation of the subject over a period of three months, consulting with prominent nurserymen and florists in different parts of the country.

(6) Following this period of investigation, Quarantine 37, with regulations, was provisionally drafted substantially along the lines in which it was afterwards promulgated and was sent in this form for consideration and criticism to the trade journals and societies represented at the hearing of May 28, 1918, and to all persons in attendance and to others who had manifested any interest in the subject, with a view to a later conference for the purpose of discussing the quarantine and the regulations thereunder.

(7) Such conference, after due notice, was held October 18, 1918, and resulted in developing a need, in the judgment of the department, for only minor modifications of the quarantine and regulations as provisionally drafted.

(8) After an additional month of examination and conference, within and without the department, the quarantine was promulgated November 18, 1918, and was made effective some six months later—June 1, 1919.

Omitting the preliminary discussion over a period of years before any action was taken by this department, it appears that between the original notice of hearing as a basis for the quarantine and the actual promulgation of the quarantine, there elapsed a period of nearly eight months of publicity, hearing, and conference, and the quarantine, as promulgated, did not become effective until some six months later.

A considerable number of conferences have been held subsequently relative to this quarantine as the basis for the minor changes which have been made in the requirements with respect to plant importations.

The Federal Horticultural Board—Its Function.

Largely on account of the somewhat misleading designation "Federal Horticultural Board" for the administrative body provided for in the plant quarantine act, there has been a lot of criticism because this board was not made up of horticulturists. As to this point of view it would seem proper to point out that the Federal plant quarantine act is for the protection of all plants and plant products of the farm and forest whatsoever, and is therefore not merely, or even largely, a nursery stock or ornamental plant law. The designation "Horticultural Board" is, therefore, in a sense a misnomer, and a better designation would have been, following the title of the act, "Plant Quarantine Board."

It has already been indicated that the board is enforcing 24 foreign and 15 domestic quarantines involving the protection of the major farm and forest resources of the Nation, and that Quarantine 37 is only one of these. Furthermore, in addition to its quarantine powers, the board, either directly or in cooperation with the appropriate bureaus, is concerned in the control under large Federal appropriations of such important pests already entered, but with limited foothold, as the pink bollworm of cotton, the white pine blister rust, the European corn borer, the potato wart, citrus canker, gipsy and brown-tail moths, Japanese beetle, and black stem rust, and other grain diseases. Probably 90 per cent of the activities of the Federal Horticultural Board and more than 90 per cent of the funds which are expended by or in cooperation with it have relation to subjects other than horticulture, and in the case of all these subjects is involved, where necessary, control of entry of foreign products under foreign quarantines and interstate movement of domestic products under domestic quarantines.

Under the terms of the act this board must be appointed by the Secretary of Agriculture from the three bureaus of the department (Plant Industry, Forestry, and Entomology) having direct relation to the farm and forest resources of the Nation from the standpoint both of production and of protection from losses due to insect pests or plant diseases, and, therefore, in its advisory function to the Secretary of Agriculture, represents these three important bureaus of the department. As now constituted the membership of this board involves two persons from the Bureau of Entomology, two from the Bureau of Plant Industry, and one from the Forest Service of this department.

It would seem to require no argument that a plant quarantine board for the administration of a plant quarantine act, having for its purpose the prevention of entry of diseases and insect pests of plants, should be technically expert on the subject of such plant enemies. For example, we do not have a public health board consisting of mothers, school-teachers, and merchants, nor is the exclusion of live-stock diseases or the eradication of the foot-and-mouth disease, hog cholera, cattle fever, etc., turned over to a commission of breeders of live stock.

Any possible adjustments to safeguard commercial and other interests involved in such quarantine and control work should be secured by conferences with such interests, such, for example, as are provided for under the plant quarantine act in the provision for public hearings after due notice at which interested parties may appear and be heard either in person or by attorney.

The ample opportunity for such conferences under the plant quarantine act is indicated in the procedure with respect to all quarantines, as follows:

1. Presentation of the need of the quarantine to the Federal Horticultural Board by experts of the department or others outside.

2. Preliminary conference conducted by the board with the department experts or any others available.

3. Open conference with the commercial and other interests involved. (This is optional, but often availed of, as in Quarantine 37, for example.)

4. Formal notification of public hearing as required in the act.

5. Public hearing.

6. Further conference of board with department experts and others to determine action based upon the hearing.

7. Drafting of quarantine and regulations by the board.

8. Resubmittal of quarantine and regulations to trade and other interests for criticism and suggestions. (Optional, but often done, as in Quarantine 37, for example.)

9. Review of the quarantine and regulations by the solicitor of the department.

10. Review of the quarantine and regulations by the Secretary, and, if approved, their promulgation.

With respect to plant quarantines, the policy of the department has been to act only after consultation with and on the advice of the experts and practical men in the various fields involved. In pursuance of this policy the department has acted with respect to horticultural matters on the advice of the many horticultural experts of the department and with others outside; similarly, in grain matters, in cotton matters, in forest matters, in truck-crop matters, etc., in each instance with the corresponding group of experts and practical men.

The final decision, therefore, of the department on all plant quarantine and related matters is based on the information and judgment of its own plant experts as well as on the facts presented at these public hearings and on all other available information, and all quarantines and regulations thereunder are operative only when approved and signed by the Secretary of Agriculture.

PLANT QUARANTINE CONFERENCE ENDS.

(Press notice.)

MAY 16, 1922.

The plant quarantine conference called by the United States Department of Agriculture and attended by more than 200 leading nurserymen and florists of the country, as well as representatives of Holland, England, Wales, and Belgium, and many State officials, came to a conclusion here to-day with the presentation of reports from the various groups participating.

As an aftermath of the conference and at the suggestion of Dr. E. Van Slogteren, of Holland, the Federal Horticultural Board will meet the foreign delegates to-morrow morning to hear their proposal for an international agreement covering the movement of plants. According to Doctor Van Slogteren, such an agreement would provide for suitable inspection and certification of the plants to prevent the spread of pests and diseases. American delegates to the quarantine conference were invited to attend also.

Orlando Harrison, of Berlin, Md., submitted the report of the committee representing the American Association of Nurserymen. He recommended that the board permit the entry of Norway maple and Schwedler's maple in 4 to 8 foot whips for a period of three years, beginning June 1 this year. This would not apply to finished stocks, but to stocks for transplanting and resale.

R. F. Elliott, a nurseryman of Pittsburgh, informally suggested that the board consider admitting plants asked in good faith and not for resale by private individuals. A report representing the amateur growers and importers of plants is yet to be made. Their side will be partly cared for in the report of the commercial importers, who are preparing their report. Repesentatives of the bulb interests also are drafting a report. James McHutchison, of New York, read the report of the Society of American Florists.

In the absence of Secretary of Agriculture Wallace, Dr. E. D. Ball, director of research of the department, presided at the final meeting to-day. A report of the conference as a whole will be made to the Secretary by an advisory committee appointed by him yesterday, consisting of Prof. J. C. Whitten, horticulturist, University of California; Dr. A. F. Woods, president of the University of Maryland; and M. R. Cashman, of Owatonna, Minn., president of the American Association of Nurserymen. They will make their report to the Secretary probably this week. The Federal Horticultural Board leaves Washington within a few days to attend an interstate conference in California, and it is not probable that the Secretary will take any action as a result of the conference until after the board's return.

The foreign delegates present were Jacques Courtine, Ollioules, France; Charles Pynaert, delegate of the Belgian Government; Louis Sander, Bruges, Belgium; F. de Selip, counselor of the Belgian Embassy; N. Van Poeteren, chief, phytopathological service, Holland; Dr. E. Van Slogteren, H. J. Arentshorst, C. J. Speelman, George Teyebour, John Radder, G. C. Eldering, P. De Wreede, and G. A. Van Zanten, Holland; and W. G. Lobjoit, controller of horticulture, London, England. The Netherlands Chamber of Commerce in New York was represented by L. Wittert Van Hoogland, secretary.

Additional names of State and Government officials, florists, nurserymen, and importers who attended the hearing are: J. H. Montgomery, plant quarantine inspector, Gainesville, Fla.; G. T. Gravatt and G. C. Starcher, State horticulturists, Auburn, Ala.; Ernest N. Cory, State entomologist, College Park, Md.; W. S. Brock, University of Illinois, Urbana, Ill.; L. R. Taft, State inspector of nurseries and orchards, Lansing, Mich.; E. W. Cole, State Department of Agriculture, Austin, Tex.; Ralph H. Taylor, representative of California State Department of Agriculture, Sacramento, Calif.; E. A. White, professor of horticulture, Cornell University, Ithaca, N. Y.; W. E. Britton, State entomologist, Agricultural Experiment Station, New Haven, Conn.; J. G. Sanders, director bureau of plant industry, Pennsylvania Department of Agriculture, Harrisburg, Pa.; C. E. Temple, State plant pathologist, College Park, Md.; W. L. Neese, secretary and treasurer Georgia State Board of Entomology, Atlanta, Ga.; Harry B. Weiss, chief bureau statistics and inspection, New Jersey Department of Agriculture, Trenton, N. J.; William H. Siebrecht, jr., representative of New York and New Jersey Association of Plant Growers, Long Island City, N. Y.; Mrs. F. B. Crowninshield, representative of the Garden Club of America, Boston, Mass.; J. A. Young, secretary Illinois State Nurserymen's Association, Aurora, Ill.; R. N. Wilson, executive secretary agricultural legislative committee of California; E. L. D. Seymour, secretary committee on horticultural quarantine, New York, N. Y.; Peter M. Miller, secretary New England Seedmen's Association, Boston, Mass.; Wallace R. Pierson, secretary and assistant treasurer, A. N. Pierson (Inc.), Cromwell, Conn., florist and nurseryman, director of the Society of American Florists; C. G. Woodbury, director bureau of raw products research, National Canners' Association, Washington, D. C.; A. L. Miller, Society of American Florists and Ornamental Horticulturists, Jamaica, L. I.; John Young, secretary Society of American Florists and Ornamental

Horticulturists, Jamaica, L. I.; Albert C. Burrage, president Massachusetts Horticultural Society and president American Orchid Society, amateur horticulturist, Boston, Mass.; Bert Ball, Spring Wheat Crop Improvement Association, Board of Trade, Chicago, Ill.; C. U. Liggitt, plant bulb and seed broker, 505 Bulletin Building, Philadelphia, Pa.; William J. Van Waghendonk, general manager and agent for United States of the General Bulb Co., Voglensang (Holland) and New York; Legers Bros. (Ltd.), importers, Lisse, Holland; J. H. Rau, A. Rynveld, Rynveld Bros., importers, Lisse, Holland, and 1123 Broadway, New York, N. Y.; M. C. de Wreede, bulb importer, Boot & Co., Voorhout, Holland, and Oakwood Heights, Staten Island, N. Y.; John R. Eddy, Eddy & De Wreede, importers and distributors bulbs, Paradise Co., Lancaster, Pa.; A. Henderson, importer, 166 North Wabash Avenue, Chicago, Ill.; A. Miller, importer, president American Bulb Co., 172 North Wabash Avenue, Chicago, Ill.; Frank H. Henry, Henry & Lee, bulb importers, 97 Water Street, New York, N. Y.; William A. Sperling, secretary Stumpp & Walker Co., seedmen, importers, and growers of seeds and bulbs, 30 Barclay Street, New York, N. Y.; Luis F. Carrillo, Carrillo & Co. (Inc.), orchid growers, Mamaroneck, N. Y.; E. G. Hill, rose grower, representing the firm of E. G. Hill Co., Richmond, Ind.; Charles H. Totty, florist, Madison, N. J.; S. S. Pennock, florist, president Society of American Florists, Philadelphia, Pa.; Severn A. Anderson, representing florists on the Canadian border, Buffalo, N. Y.; J. C. Vaughan, president Vaughan's Seed Store, Chicago and New York, growers, dealers, and importers; R. F. Elliott, president Elliott Nursery Co., bulbs and general nursery stock, Pittsburgh, Pa.; Alfred M. Campbell, florist, president Philadelphia Florist Club, Strafford, Pa.; Orlando Harrison, chairman of legislative committee of American Association of Nurserymen, and representing the fruit tree and shade tree interests, Berlin, Md.; H. Harold Hume, nurseryman, president Florida State Horticultural Society, representing the rose stock growers, Glen St. Mary, Fla.; Henry F. Michell, seeds, plants, and bulbs, 518 Market Street, Philadelphia, Pa.

BETTER UNDERSTANDING RESULTS FROM QUARANTINE CONFERENCE.

(Press notice.)

MAY 24, 1922.

A better understanding of the need of safeguarding the country's major agricultural crops against possible introduction of destructive pests and diseases is among the important results of the plant quarantine conference called by Secretary of Agriculture Wallace at Washington, D. C., May 15–16. The danger of bringing additional foreign pests into the United States was emphasized in the discussion, and officials believe that the conference went a long way toward dispelling some prejudices and mistaken ideas that exist concerning Quarantine 37 and its operation.

The quarantine, it was pointed out, recognizes the fact that any importation of plants is attended with a risk of bringing in new enemies. Conservative estimates place the annual loss to American agriculture from imported pests at about $2,000,000,000, not including the destruction done by imported plant diseases. Some of the worst pests have come in with very insignificant shipments. A single trivial importation of Japanese iris brought in the Japanese beetle. It is acknowledged that this little insect can not be exterminated, that it will continue to spread over the country, and that it will be the cause of much injury to our crops. The San Jose scale was brought in some 40 years ago with some Chinese flowering peaches. It now costs America at least

$10,000,000 a year for spraying orchards and in reduced output and value of fruit crops.

Citrus canker, introduced with Japanese trifoliate orange stock some 13 years ago, has cost about $2,130,000 of Federal and State funds for control work. Orchards and nurseries valued at $11,063,000 were burned to the ground in Florida and other Gulf States in an effort to control the disease.

A few Japanese flowering cherry trees brought in the oriental fruit worm in 1911. It is now firmly established in half a dozen Eastern States, and is expected ultimately to spread to all parts of the country, causing a continual annual charge to fruit production of millions of dollars.

From Germany came the pine blister rust in an importation of seedlings of American white pine. The disease now threatens to wipe out our white pine forests. The present stand is valued at $516,750,000 and the destruction has just begun.

One of the most spectacular scourges is the chestnut blight, brought in on a trivial shipment of oriental chestnut trees. Half of the American stand of chestnuts has succumbed thus far, and the prediction is made that by 1940 it will wipe out all trees east of the Mississippi. New York and Pennsylvania suffered total destruction. The disease is now spreading down the Appalachian Mountains as far as North Carolina and Alabama and westward into West Virginia. The present stand of chestnuts is 19⅓ billion board feet, valued at $58,000,000.

The well-known boll weevil is now here to stay. Its annual board bill is estimated at $200,000,000, with no prospect of a reduction. The other great enemy of cotton, the pink bollworm, was introduced from Mexico in 1916. Thus far Congress has appropriated about $2,500,000 for control work. Fifteen years ago the insect appeared in Egypt. From there it has spread to every cotton-producing country in the world.

Another imported pest is the potato wart, now restricted to parts of Pennsylvania, Maryland, and West Virginia. Wherever it appears, though, it causes total loss. The alfalfa weevil is also a foreign lodger brought in with soil about the roots of imported plants. It is now largely reducing the output of alfalfa in half a dozen States in the Middle West. A very unnecessary shipment from Holland of blue spruce, a native American tree, established the gipsy moth widely in New Jersey. The brown-tail moth came in roses probably from Holland or France.

These are a few of the many undesirable immigrants that the American farmer must board and lodge forever. What the United States wants to do now, if it can, is shut the doors to their brothers and their sisters and their cousins and their aunts.

Before the quarantine was put into effect plant enemies were coming into the United States with great rapidity. During the four years 1909–1912, when efforts were being made to put the legislation through Congress, the oriental fruit worm, the Japanese beetle, citrus canker, potato wart, and the European corn borer, all pests of major importance, got in and became established in commercially producing regions. No important pest is known to have become established here since the passage of the act.

Not only the representatives of American interests but the delegates from foreign countries, Holland, Belgium, England, and Wales, got a better understanding of the necessity for strict quarantine regulations. The Europeans brought the point of view of the foreign grower, who is anxious for easier and wider markets in the United States. It was made clear to them that the quarantine does not seek to exclude their plants but the pests that are likely

to damage our major agricultural crops. The quarantine regulates the importation of plants that are likely to carry pests.

Europe, it was pointed out, has no problem such as the United States has in the matter of plant pests and diseases. The wide range of climate in the United States is a big factor against us. Pests from almost any part of the world can find some congenial place within our borders. Then, too, many pests and diseases apparently harmless in their native homes develop into serious scourges when they come to the United States. In Japan the citrus canker was hardly recognized. Once introduced into the United States, however, it spread rapidly and threatened to wipe out our whole citrus industry.

Discussion at the conference centered chiefly about regulation 3, which provides for the entry of certain classes of bulbs, stocks, cuttings, and scions of fruits, rose stocks, and seeds of fruit, ornamental, and shade trees, and hardy shrubs. The question considered was whether it would be possible to modify the restrictions now being enforced with respect to the importation of foreign bulbs and plants without materially increasing the risk of entry of pests and diseases.

Leading nurserymen and florists from practically all parts of the country, as well as many State officials and other interested persons, including the representatives of foreign countries, attended. Secretary Wallace opened the meeting and presided. No formal program was followed, the discussion being free and wholly informal.

It is said to be hardly probable that Secretary Wallace will be ready to announce any decision on the results of the conference for six weeks or two months. He has yet to hear the recommendations of the committees appointed to represent the various groups. In addition he will have before him a report of the special advisory committee appointed by him, composed of Prof. J. C. Whitten, horticulturist, of the University of California; Dr. A. F. Woods, president of the University of Maryland; and M. R. Cashman, president of the American Association of Nurserymen.

Only very minor changes in the present regulations are expected, none of which will in any way increase the risk of pests and diseases entering the country. Several very slight modifications, it is believed, can be made, particularly in the matter of certain bulbs and some kinds of propagating stock that will be beneficial to American interests.

After the conference the foreign delegates laid before the board and the Secretary a proposal for an international agreement to allow the free movement of plants between countries under inspection and certification. The board pointed out that this would be impossible under the law establishing Quarantine 37, even if the United States thought the plan advisable. It took the stand that the United States would assume all the risk with but little to gain in letting down its bars.

In Europe, it was pointed out, the cultures are small and receive a great deal of personal attention, while in the United States they cover vast areas offering large opportunity for insect damage seldom found in the older parts of Europe.

Due to adverse climatic conditions of northern Europe many pests fail to become established. In the United States, though, with our wide range of climate, there is a home for practically all plant pests which may come to this country.

The United States is not a plant exporting country and the European production is such that the importation of living plants would always be limited to comparatively trivial introductions of new varieties or experimental ship-

ments. Importations to the United States from Europe, however, would run into hundreds and thousands of tons annually.

REPORT OF ADVISORY COMMITTEE APPOINTED BY SECRETARY WALLACE ON PLANT QUARANTINE CONFERENCE.

(Press notice.)

JULY 5, 1922.

Need for safeguarding the United States against the entry of foreign plant pests and diseases is emphasized in the report made to Secretary of Agriculture Wallace by the special advisory committee appointed by him to follow the proceedings of the plant quarantine conference held here in May. The belief was expressed that no material changes are necessary either in Quarantine 37 or in the regulations of the Federal Horticultural Board for its enforcement.

The report commends the idea of committees representing the various interests affected by the quarantine regulations. Frequent conferences between the committees and the board, the committee said, would bring about a clearer understanding on the part of all and secure the beneficial results sought by the act.

The committee pointed out the losses now suffered by American agriculture from pests accidentally imported before Quarantine 37 went into effect. In view of the danger of other destructive pests being brought here, the committee declared that much greater care than formerly must be exercised to keep them out. The belief was expressed that the measure of the Federal Horticultural Board is wisely directed to this end. The difficulties complained of in the administration of the quarantine, said the committee, are due to the unknown factors that have to be dealt with.

The report is signed by the late Prof. J. C. Whitten, horticulturist of the University of California, Dr. A. F. Woods, president of the University of Maryland, and M. R. Cashman, president of the American Association of Nurserymen. The conference was attended by leading florists and nurserymen from practically all parts of the country, as well as many State officials and other interested persons, including representatives of foreign countries.

The text of the report is as follows:

In response to your request of May 12, 1922, we attended on May 15 and 16 the plant quarantine conference called by you to consider particularly the classes of plants which should be permitted unlimited entry under regulation 3 of Quarantine 37 and other questions connected with the administration of this quarantine.

The conference was well attended by representatives of the various interests involved, and each and every one was given a full and impartial hearing. The subject was discussed from every angle both by representatives of groups, such as the nurserymen, florists and ornamental horticulturists, orchid growers, rose growers, etc., and by individuals. Everyone was encouraged to make constructive criticism and suggestions. After everyone who desired to be heard had spoken, often several times, including the representatives of foreign countries, each group was asked to form a committee to submit further recommendations and hold further conference. We are impressed all through with the effort made by the Secretary of Agriculture and the Horticultural Board to give a full, fair, and unprejudiced hearing to everyone.

In our opinion, the board is properly constituted as to membership and exercises unusual care to get expert opinion and advice. There is every evidence that the board intends to render every possible assistance to the trade and to individuals in making introductions.

To those familiar with the losses now being suffered by the United States from pests accidentally imported before Quarantine 37 was effective, and knowing the dangers of further introductions, it must be clear to any unprejudiced mind that much greater care than formerly must be exercised to prevent introduction of organisms that may become pests. We believe that the measures adopted by the board are wisely directed to this end. It is clearly apparent to us that the difficulties complained of in the administration of the act (Quarantine 37) are due to the necessity inherent in the work of dealing frequently with unknown factors. As the difficulties and dangers become clearer adjustments will be made to more perfectly meet the situations.

It is evident that the board wishes to do everything in its power consistent with safety to assist in securing desired importations.

We commend the idea of committees representing the various interests involved. Frequent conferences between such committees and the board will bring about a clear understanding on the part of all and secure the beneficial results that the act was intended to give.

With reference to the act (Quarantine 37) itself and the regulations under it, we believe no material changes are necessary.

CIRCULAR LETTERS OF INFORMATION RE QUARANTINE 37.

A QUARANTINE BUGABOO LAID TO REST.

HB—143

FEBRUARY 15, 1922.

Several delegates to the recent National Agricultural Conference in Washington handed me, and others mailed me, mimeographed copies of a document entitled, "Are Our Fruit and Grain Exports in Danger?" signed by John Kingdon Smith. We have been unable to secure any information as to the address or status of the author.

This document seems to be a phase of the now waning propaganda against Quarantine 37 started two years ago by a group of plant importers who wished to continue old-time unlimited importation of plants with all the old risks of entry of new plant pests. Quarantine 37 restricts the entry of foreign plants and seeds with the object of protecting the United States, so far as may be, from such entry of foreign plant pests and plant diseases.

Mr. Smith's chief fear seems to be that Europe will retaliate and cut off our grain and meat exports unless we open the door again to the practically unlimited entry of European plants. As supporting this contention he makes various statements which, on examination, prove to be for the most part either diametrically wrong or at least distinct misrepresentations; for example, with respect to the restrictions on the entry of our plants into Europe, he alleges that Europe now gives an open door to our plants. The facts are that leading countries of continental Europe began the prohibition of American plants in connection with phylloxera some half a century ago and some 25 years ago made such prohibitions practically complete, following the general invasion of this country by the San Jose scale. During this later period, many of the leading European countries—Holland, France, Germany, Austria, Switzerland—have been closed to the entry of living plants from America, and others—Belgium, Italy, Spain, Turkey, Russia—have been closed in lesser degree. Even Great Britain, Norway, and Sweden have restrictions against certain plants. Our fruits and fruit products, furthermore, get into some of these countries only under burdensome restrictions. These conditions still obtain, but no one has questioned the right and desirability of Europe to thus protect her own cultures.

By contrast, Quarantine 37 provides for the entry into the United States of vast quantities of plants from Europe and other parts of the world, and, in fact, makes provision for the entry of any plant whatsoever for which a real need in the interests of our horticulture or floriculture can be shown.

As a mere side light on the amount of plant importations which are permitted from Europe under this quarantine, which is alleged to cut off such importations, it may be stated that no less than 6,000 open continuing permits have been issued during the last two years for the introduction of certain important classes of plants and seeds, and the entry of these classes is not restricted in any way as to quantity. These permits cover nearly 90 per cent of the bulbs hitherto imported, fruit and rose stocks, and all seeds of fruit, forest, and ornamental trees.

Certain other classes of plants and plant products are permitted free and unrestricted importation. i. e., no permit is required and no control is exercised under this quarantine. These include field, vegetable, and flower seeds, and all fruits, vegetables, and cereals and other plants and plant products imported for medicinal, food, or manufacturing purposes.

Under Quarantine 37 all other classes of plants are permitted entry in any necessary quantity for any real horticultural or introduction need. These are the so-called "prohibited plants," but for the entry of such plants during the period of the quarantine since June 1, 1919, there have been issued 1,428 permits authorizing the entry of 29,347,609 plants! As an indication of the liberality of entry under these permits, there have been issued a total of 148 permits for the entry of new roses. These permits have authorized the entry of 54,742 rose plants and under these permits upward of 41,000 rose plants have already been entered. These entries include to date 459 roses, nearly all new varieties, out of a total authorized entry of 1 148 different varieties of roses, again nearly all new. To a reasonable person it would seem that upward of 400 new varieties of roses is a pretty sizable number to be introduced and assimilated in a period of a little over two years, especially in comparison with the lists recently published by the American Rose Society, indicating that only 146 new varieties of roses were originated in all the world in something over a 12 months' period, 1920–21, and that 592 varieties represent the total number of new roses which have been originated in the United States from the very beginning of rose culture. It should be remembered that the rose is only one of many classes of plants which have thus been authorized entry under Quarantine 37.

To recapitulate, Quarantine 37 places no restrictions whatsoever on the importation from Europe of all fruits, vegetables, cereals, and other plant products for food, manufacturing, or medicinal purposes, or of field, vegetable, and flower seeds; provides for unlimited entry under open continuing permits of five important classes of plants and seeds; and makes provision for the entry under special permits of all other plants for the purpose of keeping the country supplied with new varieties or any necessary propagating stock. These provisions cover all plants and seeds whatsoever for propagation or other uses and indicate the purpose of the department under this quarantine to provide for the entry of any necessary or useful plant in quantities sufficient to meet all reasonable needs. In the meantime the gates of many European countries remain closed, as they long have been, to the entry of American plants.

The bugaboo of retaliation which Mr. Smith raises would seem to have very little basis, and it is rather amusing that he should seize as an excuse for such retaliation the "take-all" disease of wheat, which has very limited foothold in the United States and is under strict quarantine, but which is known to occur in Italy, France, Germany, Belgium, Great Britain, and Ireland!

As to returning to the old practically free entry of foreign plants, a test over a seven-year period was given to the possibility of safeguarding such plant importation by inspection and disinfection, and this test indicated the absolute

inadequacy and failure of this method of excluding new pests and forced the conclusion on this department and on the plant experts of all of our States that the only safeguard for the future was the exclusion of all plant stock not absolutely essential to the agricultural, horticultural, and forestry needs of the United States. Quarantine 37 carries out this policy, but makes, as already indicated, very liberal provision for the entry of any necessary plant stock.

This propaganda of John Kingdon Smith is somewhat of the same order as that dealt with in a statement issued by this board February 25, 1921. Inasmuch as you may be interested in this subject, I am enclosing a copy of this statement, which answers a lot of unfounded criticism of Quarantine 37.

C. L. Marlatt,
Chairman, Federal Horticultural Board.

IMPORTATION UNDER REGULATION 2, QUARANTINE 37, OF "PLANT PRODUCTS" IN A LIVE STATE, OTHER THAN THE CLASSES SPECIFICALLY ENUMERATED, ARE SUBJECT TO RESTRICTION.

HB—144

February 27, 1922.

In addition to the requirement of freedom from sand, soil, or earth, it is apparent from the purpose of Quarantine 37 that importations for medicinal, food, or manufacturing purposes under regulation 2 shall not be a means of invalidating the control which is provided for in the following regulations for all nursery stock and other plants and seeds and for "plant products" "capable of propagation."

Quarantine 37 includes all "plants and plant products for or capable of propagation."

Regulation 2 provides for the entry without permit or other compliance with the regulations, when free from sand, soil, or earth, of two classes of plants, the first of which is described as follows:

(1) Fruits, vegetables, cereals, and other plant products imported for medicinal, food, or manufacturing purposes.

The words "other plant products" were intended to cover only such articles as spices, bark, cork, logs, lumber, hay, and other articles for the purposes indicated, not capable of propagation.

It is ordered, therefore, that all importations under section 1 of regulation 2 for medicinal, food, or manufacturing purposes, of plant products, other than fruits, vegetables, and cereals, shall be inquired into to determine, first, whether such articles are capable of propagation, and, second, the risk, if any, of entry of plant pests in connection with the entry and movement of the articles in question for the use intended.

It is further ordered that requests for authority to import any such articles in a live state, together with the results of any inquiries made with respect thereto, shall be submitted to the board for approval prior to authorizing the importation.

With respect to fruits, vegetables, cereals, and plant products other than in a live state or capable of propagation (sec. 1), and field, vegetable, and flower seeds (sec. 2) of regulation 2, should it be necessary and desirable to restrict the entry of any articles under these designations, such action would involve a specific quarantine.

Approved by board, February 24, 1922.

C. L. Marlatt,
Chairman, Federal Horticultural Board.

IS QUARANTINE 37 A PLANT EMBARGO?

HB—145

MARCH 1, 1922.

In view of the belief, which seems to have gained considerable acceptance, that Quarantine 37 amounts to an embargo against foreign plants, the record of permits issued for the importation of the so-called "prohibited plants" and the importations made thereunder should be of interest.

The risk of entry of new plant pests goes with every importation of plants, even those now permitted, and to reduce this risk as much as possible and yet provide for the horticultural development and progress of the country, the importation under regulation 14 of this quarantine of the so-called "prohibited plants" is limited to new varieties and such other plants as are believed to be unavailable in the United States for necessary propagating purposes.

The table given below is a record of such importations from the effective date of the quarantine, June 1, 1919, to February 15, 1922; in other words, a period of a little over two years and eight months.

Special-permit importations for the fiscal years 1920, 1921, and 1922, (up to and including February 15, 1922).

Classes of plants.	Number of permits.	Quantity authorized.	Quantity imported.	Number of varieties.		
				Requested.	Approved.	Per cent approved
Gladiolus	320	17,042,476	6,460,341	626	494	79
Dahlia	117	10,061	4,840	1,078	1,007	93
Iris	245	7,363,564	4,690,367	1,114	1,074	96
Peony	168	295,525	86,584	1,222	925	76
Other bulbs, roots, etc	167	2,789,881	1,164,475	609	587	96
Ornamentals	179	995,545	285,190	1,770	1,494	84
Roses	148	54,742	41,211	1,373	1,162	85
Orchids	103	35,825	13,492	1,168	1,098	94
Herbaceous plants	140	756,839	198,453	1,289	1,180	92
Small fruits	22	3,151	253	23	23	100
Total	.....	29,347,609	12,945,206	10,272	9,044	88

The total of 29,347,609 plants which has been authorized entry, and the 12,945,206 plants which have been actually entered to date, would seem to indicate that the so-called "prohibited plants" are receiving at least some recognition from the Federal Horticultural Board. The discrepancy between the numbers of plants authorized and the numbers imported is due largely to the fact that the permittees have not been able to secure abroad the quantities of plants which they were authorized to import—and this was especially true in the first two years of the quarantine. In many instances such permits were reissued the year following. In the case of permits issued for the current year the importations are for the most part not yet made.

IMPORTATIONS OF NEW ROSES UNDER QUARANTINE 37.

As indicating more clearly the possibilities of entry of new or unavailable plants under this quarantine, the story of rose importations is fairly informing. During the period of the quarantine a total of 148 permits has been issued for the importation of new roses or roses not available in the United States. These permits have authorized the entry of 54,742 rose plants, representing 1,148 different varieties, and under these permits 41,211 rose plants have already been entered, representing 459 different varieties of roses, for the most part new varieties!

In connection with these rose importations it is interesting to compare certain records given in the 1921 American Rose Annual, published under the authority of the American Rose Society. In this very creditable volume, under the title "The new roses of all the world," there are listed a total of only 146 rose varieties for the 12-month period covered by this annual. This annual also gives an "Official list of American roses," which includes all varieties of roses which have been originated in the United States from the very beginnings of rose culture, and the number is 592. Contrasted with these fairly modest numbers, it would seem that 459 varieties of roses, mostly new, already entered under Quarantine 37, is a fairly sizable number to be assimilated in a period of a little over two years, to say nothing of the authorizations outstanding which may very shortly double this number.

Similar analyses could be given for the other classes of plants listed in the table, but I think the record of rose importations is adequate to indicate that new varieties of ornamentals and other plants can be and are being brought into this country in fairly adequate numbers under the quarantine.

Many Plants and Plant Products Not Limited as to Entry.

In a discussion of the entry of these so-called "prohibited plants" it should not be forgotten that under regulation 3 of Quarantine 37 certain important classes of plants are open to unlimited importations under continuing permits, upward of 6,000 of which have already been issued. These permits cover nearly 90 per cent of the bulbs hitherto imported, fruit and rose stocks, and all seeds of fruit, forest, and ornamental trees. Under regulation 2 also certain other classes of seeds are free from all restrictions, even the taking out of a permit, namely, field, vegetable, and flower seeds, and also all fruits, vegetables, and cereals, and other plant products imported for medicinal, food, or manufacturing purposes.

These provisions, together with those already discussed for the entry of the so-called "prohibited plants," cover all plants and seeds whatsoever for propagation or other uses, and indicate the purpose of the department under this quarantine to provide for the entry of any necessary or useful plant in quantities sufficient to meet all reasonable needs.

European Embargoes and Restrictions.

In contrast with this liberality of entry from Europe and other foreign countries are the restrictions against entry of American plants, particularly enforced by the countries of Europe. These began 50 years ago in connection with the grape phylloxera, an American pest, and some 25 years ago were extended by important European countries to a practical embargo on account of the San Jose scale. For example, Holland, France, Germany, Austria, and Switzerland prohibit the entry of all living plants from America, and other countries—Belgium, Italy, Spain, Turkey, and Russia—are closed in lesser degree. Even such countries as Great Britain, Norway, and Sweden have restrictions against certain classes of plants, and our fruits and fruit products get into some of these countries only under burdensome restrictions. These conditions still obtain, and no one questions the right of European and other countries to thus protect their own cultures.

Reasons for Restrictions on Issuance of Special Permits.

Aside from the purely commercial interests who would like to import cheap foreign plants for a quick turnover and profit, the principal objection which is

now raised to Quarantine 37 is that sufficient liberality of importation is not extended to plant lovers and enthusiasts, making it possible for such persons to bring in, for their personal use and the adornment of their gardens or estates, any new or old varieties which they may wish to secure. The Federal Horticultural Board and the Department of Agriculture would be only too glad to meet the wishes of such persons, and their name is legion, if it were not realized that this action would practically nullify the quarantine. Persons of this general type interested in plants are found in numbers in every town and hamlet in the United States, and to permit any or all of them to import plants for personal use in such condition that they could grow them, would mean not only that the plants would have to come, in many cases, in earth ready for immediate planting—involving dangers of plant pest introductions which can not be safeguarded by inspection or treatment—but that it would be absolutely impossible for this department to handle the tens of thousands of small importations which would result, or to follow them up to destinations throughout the country with any subsequent safeguards. There would rarely be any public service of real value in connection with such importations, such as making the new plants generally available or utilizing them for breeding or other work. Some essential service of this sort should be the basis for the entry of the various classes of plants which are not open to unlimited importation. The mere personal gratification of hundreds or thousands of individuals who might wish to make their own importations would be small justification for the risk of carriage of new pests to every part of the United States—a risk which would be vastly greater than before Quarantine 37 was established.

This situation led to the exclusion of importations for mere personal use or gratification and to the limitation of the issuance of special permits for the entry of new or unavailable plants chiefly to plant propagators who will agree to utilize the plants imported for the purpose of reproducing additional stocks for a period of one to five years, based on the time needed for such multiplication or reproduction. The immediate sale of plants thus imported is not permitted, but no restrictions are placed on the sale of the plants produced from the imported stock, except that the importer will be expected to maintain a sufficient supply to meet his future needs.

It is expected, therefore, that importations under regulation 14 will be largely by persons who will propagate the imported stock as a commercial enterprise, and thus perform a public service by making such plants generally available. The only exceptions are the issuance of permits to provide for the needs of botanic gardens, agricultural colleges, experiment stations, and other similar public institutions, and to those few amateurs who are widely or nationally known as maintaining collections of real merit and open to the public or engaged in work of public benefit with the plants concerned. If such persons are not known to the experts of this department, they will be required to furnish evidence of their status.

In the event, however, that the authorized agencies, commercial or other, do not bring in varieties of plants which enthusiastic plant lovers may wish, the department has made special provision for the entry through its Office of Plant Introduction of any neglected or overlooked new varieties, and, incidentally, this office has been undoubtedly the principal agency for the importation of new plants into the United States for the last 20 years.

To recapitulate, the existing provisions for the entry of new or unavailable plants under regulation 14 include (1) all the importations which any commercial grower is willing to make, and such commercial growers include per-

sons of world-wide recognition as plant specialists and breeders; (2) importations by botanic gardens and some hundred experiment stations and other public institutions with enthusiastic experts in horticulture and floriculture; (3) importations by the leading and recognized amateurs of the country; and (4) importations through the Office of Foreign Seed and Plant Introduction of the Department of Agriculture.

Under the plan, therefore, of Quarantine 37 it becomes necessary for persons who are neither commercial growers of plants nor amateurs who are recognized as maintaining collections of real merit or engaged in research or other work of distinct public benefit with the plants concerned—in other words, the ordinary plant lover who wants the plants for his own garden or the adornment of his own estate—to secure new varieties from home sources, and the department has endeavored, through the means enumerated, to make available such new varieties of plants under methods which involve the least risk to the horticulture and agriculture of the country.

C. L. Marlatt,
Chairman, Federal Horticultural Board.

VIOLATION OF PLANT QUARANTINE NO. 37.

HB—149

May 12, 1922.

The Federal Horticultural Board has secured evidence that the National Bulb Farms (Inc.), of Benton Harbor, Mich., in a shipment made in April, 1922, by special permit under regulation 14 of Plant Quarantine No. 37, substituted for the varieties authorized by such permit certain other varieties abundantly available in the United States, not authorized by the permit and previously rejected from applications made by this company. The substituted varieties were labeled with the names of the permitted varieties.

After discovery by the Federal Horticultural Board of the fraud, a representative of the company admitted the above facts.

In view of the evidence above referred to, the board, believing this to be a violation of the plant quarantine act and of the rules and regulations supplemental to Plant Quarantine No. 37, under the provision of Regulation 13 for the cancellation of permits for violation of the regulations, has ordered as follows:

(1) The shipment containing the substituted material is refused entry.

(2) All existing permits issued for importations by the National Bulb Farms (Inc.), Benton Harbor, Mich., are canceled.

(3) Further permits for importation by the National Bulb Farms (Inc.), will not be issued until the board is convinced, from satisfactory evidence submitted by the company, that similar fraudulent practices will not be repeated.

C. L. Marlatt,
Chairman of Board.

BRIEF NOTES ON PESTS INTERCEPTED ON FOREIGN PLANTS OFFERED FOR ENTRY.

HB—150

May 12, 1922.

The pests intercepted by State and Federal inspectors on plants arriving from foreign countries have been published in the Quarterly Letters of Information, superseded on December 31, 1920, by the Annual Letter of Information. The Annual Letter covering interceptions for the calendar year 1921 is now in press. This circular, therefore, merely includes:

1. Summary by countries indicating different kinds (species) of insects intercepted by State and Federal inspectors, August 20, 1912, to April 22, 1922.

2. Some of the important insects and plant diseases intercepted on plants and plant products offered for entry from August 20, 1912 to April 22, 1922.

3. Miscellaneous notes on insects and plant diseases which have been or may be introduced with certain plants and in soil: (*a*) orchids, (*b*) roses, (*c*) bulbs, and (*d*) soil.

SUMMARY OF COUNTRIES INDICATING DIFFERENT KINDS (SPECIES) OF INSECTS INTERCEPTED BY STATE AND FEDERAL INSPECTORS, AUGUST 20, 1912, TO APRIL 22, 1922.

Many of these pests have been intercepted on hundreds of different shipments; in other words, have come into this country that many different times. Furthermore, these interceptions are practically limited to findings on the stems and leaves of the plants, inasmuch as it was not possible during the seven-year period when soil was admitted to make examinations of such soil except as to occasional test examinations. The results of such examinations, however, were so alarming as to give ample basis for the exclusion of plants with soil. Many of these interceptions are of pests of known large importance new to the United States, and others are of similar pests which have only limited foothold in this country. They have been made on importations of all classes of ornamentals, including, for example, long lists of pests found with rose importations, with bulb importations, with orchid importations, etc.

List by countries of the number of kinds of insects intercepted.

Algeria	16	Holland	167
Antigua	19	India	33
Argentina	19	Ireland	21
Assam	2	Isle of Pines	19
Australia	78	Italy	64
Austria	2	Jamaica	72
Azores	8	Java	10
Bahama Islands	45	Japan	164
Belgium	73	Mexico	95
Bermuda	50	New Zealand	24
Brazil	113	Nicaragua	14
British Guiana	19	Norway	3
British Honduras	9	Panama	39
British West Indies	7	Paraguay	10
Canada	19	Philippine Islands	80
Canal Zone	41	Porto Rico	35
Canary Islands	7	Portugal	3
Ceylon	9	Salvador	2
Chile	25	Scotland	14
China	90	Siam	11
Colombia	115	Sicily	2
Cook Island	4	South Africa	10
Costa Rica	63	Spain	21
Cuba	108	Spanish Honduras	61
Czechoslovakia	15	St. Kitts	2
Denmark	6	Straits Settlements	22
Dominican Republic	7	Sweden	6
Ecuador	25	Tahiti	7
Egypt	12	Trinidad	23
England	104	Turkey	4
France	245	Venezuela	31
Guatemala	78	Virgin Islands	8
Haiti	13	Wales	1
Hawaii	59	Windward Islands	1

SOME OF THE IMPORTANT INSECTS AND PLANT DISEASES INTERCEPTED ON PLANTS AND PLANT PRODUCTS OFFERED FOR ENTRY FROM AUGUST 20, 1912, TO APRIL 22, 1922.

INSECTS.

GIPSY MOTH (*Porthetria dispar* L.)

Twenty-eight infested shipments arrived from August 20, 1912, to May 31, 1919, inclusive, and 2 infested shipments from June 1, 1919, up to and including April 22, 1922—total 30 as follows: France, 10 (apple 2, beech 1, *Cydonia oblonga* 5, rose 1, unknown plant 1); Belgium 9 (azalea 7, unknown 2); Holland 3 (boxwood 1, blue spruce 2); Japan 8 (camellia 1, cedar 3, thuya 2, unknown plant 2).

Introduced and established in the United States and is recognized as a very serious pest.

BROWN-TAIL MOTH (*Euproctis chrysorrhœa* L.)

Thirty-nine infested shipments arrived from August 20, 1912, to May 31, 1919, inclusive, and 58 infested shipments from June 1 ,1919, up to and including April 22, 1922—total 97, as follows: France 95 (apple 27, cherry 9, *Cratægus* sp. 1, *Cratægus oxyacantha* 1, *C. flora* 1, *Cydonia oblonga* 10, fruit stocks 14, pear 11, purple barberry 1, cotoneaster 2, *Fagus sylvatica* 1, rose 6, plum 3, *Pinus mughus* 1, *Prunus pissardi* 1, *Sorbus aucuparia* 1, unknown plant 5); Holland 1 (fruit seedling 1); Ireland 1 (rose 1).

General defoliator and a very serious introduced pest of shade and forest trees in the northeastern United States.

RED-TAIL MOTH (*Dasychira pudibunda* L.)

Two infested shipments arrived prior to May 31, 1919, as follows: Belgium 2 (azalea 1, unknown plant 1).

The red-tail moth is a general feeder and attacks beech, hornbeam, oak, alder, buckthorn, hawthorn, blackthorn, hazel, rose, birch, elm, linden, and maple. In 1910 the late Dr. J. B. Smith recorded this insect from Bergen County, N. J; apparently, however, it has not been collected in New Jersey since that date. It occurs in Europe, China, and Japan, and ranks with the brown-tail and gipsy moths as a pest of prime importance.

SORREL CUTWORM (*Acronycta rumicis* L.)

Fifteen infested shipments arrived from August 20, 1912, to May 31, 1919, inclusive, and 10 shipments from June 1, 1919, up to and including April 22, 1922—total 25, as follows: Belgium 1 (azalea 1); France 23 (*Cornus* sp. 1, quince 3, *Cydonia japonica umbellata* 1, deutzia 1, *Fagus sylvatica* 1, *Forsythia fortunei* 1, fruit stocks 2, mahaleb 2, pear 1, *Prunus cerasus* 3, rose 5, *Populus* sp. 1, unknown plant 1); Holland 1 (*Azalea amoena* 1).

Not established in the United States. Reported in European literature to be an omnivorous feeder, attacking the foliage of strawberries, hops, and various shrubs and trees.

WHITE TREE PIERID (*Aporia cratægi* L.)

Fourteen infested shipments arrived from August 20, 1912, to May 31, 1919, inclusive, and 73 shipments from June 1, 1919, to April 22, 1922—total 87, representing 1,434 nests, all of which arrived on shipments from France. Hosts infested: Apple 39, *Cydonia oblonga* 10, cherry 3, pear 14, plum 15, fruit trees 2, nursery stock 2, unknown plant 2.

A general feeder, attacking in Europe the foliage of fruit trees, wild rosaceous plants, and deciduous shade trees. Reported to completely defoliate bushes and trees in Rumania at times.

SWAN OR GOLD-TAIL MOTH (*Porthesia similis* Fuessly).

Seven infested shipments arrived from August 20, 1912, to May 31, 1919, inclusive, as follows: Holland 6 (*Acer atropurpureum* 1, *Laburnum* sp. 1, lilac 1, Japanese maple 1, rose 2); France 1 (*Cerasus avium* 1).

Reported to be a general defoliator of forest, deciduous, fruit, and nut trees. Theobald, F. V., "Insect Pests of Fruit," p. 27, states:

"The caterpillar of this moth is often very harmful, not only to hawthorn hedges but also to fruit trees throughout the country at certain times.

"It occurs on apple, plum, pear, cherry, nuts, and roses. The pretty caterpillars devour the foliage. The chief harm is done by the young larvæ when they come from their winter quarters, for they feed ravenously on the tender leaves."

EUROPEAN LACKEY MOTH (*Malacosoma neustria* L.)

Six infested shipments arrived from August 20, 1912, to May 31, 1919, inclusive, and 4 shipments from June 1, 1919, up to and including April 22, 1922—total 10, as follows: France 5 (apple 2, fruit seedlings 1, mahaleb stock 1, plum stock 1); Holland 5 (boxwood 2, laburnum 1, Norway maple 1, host unknown 1).

The larvæ strip infested trees of foliage, and in addition to the above are also recorded to attack oak, elm, hawthorn, poplar, and hornbeam. Distribution: Europe, Western Asia, Siberia, China, and Japan.

DICHOCROCIS PUNCTIFERALIS GUENÉE, Family Pyralidæ.

Intercepted on pine from Japan June 8, 1921. Although primarily a maize pest, it is a serious enemy of fruit trees in Queensland. Also attacks peach, pawpaw, apple, orange, loquat, guava, cassia, custard apple, granadilla, banana, millet, *Canavalia indica*, senna bean, dahlia, castor bean, cacao, sunflower, *Elettaria cardamomum*, mango, ginger, *Cucuma longa*. Distribution: Australia, Japan, China, India, Burma, Ceylon.

LECANIUM CORYLI (L), scale insect.

Two infested shipments arrived from August 20, 1912, to May 31, 1919, inclusive, and 7 infested shipments from June 1, 1919, to April 22, 1922—total, 9, as follows: Czechoslovakia, 5 (apple 1, cherry 2, prune 1, *Tilia dasystila fastigiata lacincinata* 1); Germany, 1 (cherry 1); Holland, 2 (horse-chestnut 1, rose 1); England, 1 (host unknown 1).

Not known to occur in the United States.

EUROPEAN TUSSOCK MOTH (*Notolophus antiqua* L.).

One hundred and forty-six infested shipments arrived from August 20, 1912, up to May 31, 1919, inclusive, and 1 shipment from June 1, 1919, up to and including April 22, 1922—total, 147, as follows: France, 59 (althea 1, apple 4, plum 7, *Betula alba* 1, *Betula* sp. 3, buckthorn 3, cherry 3, *Cornus mascularia* 1, *Cydonia japonica* 1, fruit stocks 5, lilac 1, *Lonicera* sp. 1, honey locust 2, maple 2, ornamental stocks 1, pear 7, privet 1, quince 2, *Rhus glabra* 1, rose 5, *Spirea arguta* 1, sycamore 1, tamarix 2, *Viburnum opulus* 1, unknown host 2); Denmark, 3 (apple 1, rose 2); England, 3 (apple 1, rose 2); Holland, 80 (apple 1, azalea 4, *Betula* sp. 1, *boxwood* 1, *Cerasus* sp. 2, *Crataegus* sp. 1, *deutzia* 1, horse-chestnut 1, hydrangea 3, *Juniperus* sp. 1, laburnum 1, lilac 1, linden, American, 1, linden, European, 1, magnolia 1, maple 10, oak 1, *Prunus* sp. 4, rhododendron 2, rose 38, unknown host 4); Belgium, 1 (bay 1); Ireland, 1 (rose 1).

According to English writers, this insect is somewhat partial to civilized life, and frequents trees in densely populated cities, gardens, and parks. At times, it is responsible for considerable damage to roses and to fruit and forest trees.

DAGGER MOTH (*Apatela auricoma*).

Ninety-three infested shipments arrived from August 20, 1912, up to May 31, 1919, inclusive, and 5 shipments from June 1, 1919, up to and including April 22, 1922—total, 98, as follows: France, 88 (ampelopsis 1, apple 5, barberry 3, birch 3, buckthorn 1, *Carragana arborescens* 1, cherry 13, cranberry 1, deutzia 1, elm 1, fruit stocks 4, honeysuckle 2, hydrangea 1, lilac 3, rose 10, maple 1, plum 7, pear 12, *Philadelphus coronarius* 1, quince 3, *Spirea sorbifolia* 1, *S. thunbergii* 1, *Symphoricarpos* sp. 1, viburnum 4, *Weigelia rosea* 2, unknown host 5); Holland, 8 (*Azalea viscosa* 1, cherry 2, rose 3, spirea 1, unknown host 1); England, 2 (rose 2).

This insect belongs to the family Noctuidæ. Many of the caterpillars of this family belong to the type known as "cutworms" and are decidedly injurious.

JAPANESE CAMPHOR SCALE (*Pseudaonidia duplex* Ckll.)

Thirty-four infested shipments arrived from August 20, 1912, to May 31, 1919, inclusive, and 5 shipments from June 1, 1919, up to and including April 22, 1922—total, 39, as follows: Japan 39 (azalea 11, camellia 19, citrus 2, persimmon 2, plum 1, pyrus 1, tea 1, unknown 2).

This scale insect has recently made appearance in destructive numbers in New Orleans and is said to attack some hundred or more different hosts. It has also been found in three localities in the State of Mississippi.

THRIPS COMMUNIS PULLA Uzel.

This thrips has been collected on three occasions; once on chrysanthemum from France, once from England on the same host, and once from Egypt on palms. In the first two instances the plants were in the possession of passen-

gers, and therefore arrived without permit. It is an insect capable of occasioning much injury to chrysanthemums and possibly other greenhouse plants. These three interceptions were made after June 1, 1919.

RHODODENDRON LACE BUG (*Leptobrysa rhododendri* Horv.).

Twenty-seven infested shipments arrived prior to May 31, 1919, as follows: Belgium (rhododendron 1); England (rhododendren 3); Holland (rhododendron 23).

This insect also attacks the mountain laurel (*Kalmia latifolia*). The greatest injury is caused by the nymphs and adults feeding on the under surface of the leaf.

PLANT DISEASES.

Plant diseases are very difficult to detect at time of inspection. Frequently they are dormant and invisible at the time the plants are shipped. A number of important disease epidemics have occurred in the United States from imported diseases. Citrus canker, the white pine blister rust, the chestnut bark disease, and the potato wart are recent cases well known to the American people. Some other disease interceptions are as follows:

JAPANESE CEDAR RUST (*Gymnosporangium japonicum*).

This disease has been intercepted on 5 shipments of *Juniperus chinensis* from Japan. The alternate hosts are various species and forms of *Pyrus* and *Malus*. If introduced, this disease might pass over to the American pears and apples and well prove as serious as the common apple-cedar rust of the eastern United States.

RHODODENDRON RUST (*Chrysomyxa rhododendri*).

Intercepted on approximately 35 shipments of azaleas from Belgium, 1912-1919. The disease has not been collected since Quarantine 37 became effective.

LEAF CURL OR GALL-FORMING DISEASE (*Exobasidium*).

This fungus, which curls and distorts the leaves of azalea and rhododendron, is very common throughout Europe, particularly in Holland, Belgium, and France. A related species occurs in the United States. Interceptions have been as follows: 1913, 38; 1914, 68; 1915, 167; 1916, 192. Material inspected since the advent of Quarantine 37 has been more free of the disease, although commonly present.

CROWN GALL (*Bacterium tumefaciens*).

This disease is widespread in the United States but is also intercepted on nursery stock of all kinds from Europe. Apparently no attempt is made to free shipments of diseased plants. Over 500 lots infected with crown gall have been found since 1912. Practically every shipment of fruit and rose stocks contains varying percentages of infected plants. Ornamentals entering under special permit, particularly rhododendrons and azaleas, are also found infected but to a less degree than the fruit and rose stocks. This is due not to greater resistance on the part of the ornamentals but to greater care exercised in the foreign nurseries. A plant infected with crown gall is permanently stunted in its growth, and, while it may not be killed outright, it will seldom develop into a normal plant.

SCLEROTIAL ROT OF IRIS (*Sclerotium* sp.).

This disease differs from either of the two iris rhizome rots which occur in this country. It has been intercepted in three different shipments from Germany and Holland. In each case the rhizomes were badly rotted.

NOTE.—Particularly in connection with plant diseases, but also to some extent with insect enemies, the introductions which have been most disastrous to the American agriculture, horticulture, and forestry have been of diseases and insects which were unknown prior to their entry and establishment in the United States and, therefore, could not have been specifically guarded against by inspection and certification. Particularly is it true of plant diseases, as already noted, that in the state in which the plants are imported there may be no easily discoverable indication of the presence of such diseases, and in the case of some diseases their presence can be determined only after a period of months or even years. Illustrations of such pests, unknown prior to their entry and establishment in the United States, are the chestnut blight, the citrus canker, the San Jose scale, and the oriental fruit worm.

It should be emphasized, therefore, that the records and discussions given in this circular relate only to known or plainly visible pests and afford no indication of the possible entry of perhaps much more serious enemies, insect or fungous. The fact also that these records are very fragmentary as to pests which may have been brought to this country with soil about plants during the period covered has already been indicated.

Miscellaneous Notes on Insects and Plant Diseases Which Have Been or May Be Introduced With Certain Plants and in Soil.

ORCHIDS.

One hundred and seventy-nine species of insects have been intercepted on orchids from August 20, 1912, up to and including April 22, 1922, many of which are new to the United States; for example, *Eutermes* sp. (a white ant), an unrecognized pyralid (moth), *Dinex americana* (earwig), and others.

There is perhaps no group of plants more susceptible to insect attack than the orchid. Moreover, their introduction is attended by a great risk, since they are for the most part collected in unexplored (entomologically) regions of Central and South America. A careful examination of three cases of Colombian orchids in 1917 revealed the presence of 17 species of insects distributed in the following orders: Orthoptera, Hymenoptera, Hemiptera, Coleoptera, Lepidoptera, Corodentia, and Collembola.

In addition to the above, numerous accounts of injurious orchid insect pests may be found in literature. The State entomologist of Wisconsin reported in 1916 that a new orchid weevil (*Cholus cattleyae*), probably introduced from Colombia, was causing a very great loss among the Cattleya orchids, and stated that as a result of its presence the stem rots and fails to bear a flower. According to G. C. Champion, this species is allied to *C. forbesi* from Ecuador and two related forms which occur in Central America. *Diorymellus laevimargo*, a small black beetle, is at times found abundant in orchid houses in the United States, feeding on Cattleyas and Dendrobiums. In addition to feeding on the leaves, pseudobulbs, and flower stalks, this beetle is also credited with doing damage to flowers and unopened flower buds. There are eight known species of this genus in Central America. The orchid weevil (*Acythopeus* (*Baridius*) *orchivora*) which was reported from New South Wales in 1904, has in recent years been introduced into New Jersey, attacking various species of Dendrobiums, especially *D. findlayanum* and *D. crystallinum*.

The orchid plant bug (*Tenthecoris bicolor*) which was intercepted in shipments of Colombian orchids by inspectors of this board, is occasionally met with in greenhouses in this country. The adults and nymphs live on the under side of the leaves, sucking their juices, Cattleyas being especially subject to attack, and Laelias and Sophronitis often showing characteristic spotting of the leaves. The orchid root borer (*Castnia therapon*), the adult of which is a showy moth native of Brazil, hollows out the roots and bulbs of *Oncidium crispum* and *Cattleya labiata* and the orchid bulb borer (*Eucactophagus graphipterus*) destroys the interior of the bulb of *Lycaste*, *Odontoglossum*, and various other species possessing large, soft bulbs. The Cattleya midge (*Parallelodiplosis cattleya*) attacks the roots of various species of Cattleya, and the Cattleya fly (*Isosoma orchidearum*) causes the bulbs to become swollen and hollowed out inside and fail to produce flowers. The latter insect seems to be well established in the United States and is very difficult to control. A longicorn beetle (*Diaxenes taylori*) was found in orchids introduced into England from southern Burma, and a second species of this same genus, *D. dendrobii*, was found in several kinds of orchids in the Royal Botanical Gardens, Edinburgh. (See Gardeners' Chronicle, June 11, 1887, and same publication, July 24, 1897.) The orchid thrips (*Anapothrips orchidaceus*) is reported from England, Scotland, Ireland, Belgium, Norway, Sweden, Denmark, and Holland on Cattleyas, Cymbidiums, Epidendrons, Odontoglossums, and other orchid genera. It would be possible to greatly enlarge this list of insects; however, space will not permit.

PLANT DISEASES.

Diseases have been intercepted a number of times on imported stock, including rusts (*Uredo* spp.) and a leaf spot due to the fungus *Physalospora cattleya*.

A brown spot and rot due to *Bacillus cypripedii* occurs on species of Cypripedium and Phalaenopsis in Japan and Formosa, where it does much harm both in the wild and in greenhouses. It spreads rapidly.

Six other bacterial diseases of Cattleya, Oncidium, Odontoglossum, and Vanilla are reported from Italy.

An orchid rust caused by *Hemileia oncidii* occurs on Oncidium, Epidendrum, and Lycaste in greenhouses in France, Ireland, Germany, and Brazil.

Thirty-three other rusts of orchids occur in various parts of the world, and seven of these are reported from the orchid houses of Europe.

Seventy-five leaf spots and blights of orchids are listed; 49 of these are reported from Europe.

ROSES.

Eighty-one species of insects were intercepted on roses from August 20, 1912, up to and including April 22, 1922. This number includes such well-recognized pests as the gipsy moth from France; the gold-tail moth from Holland; the European tussock moth from Denmark, England, France, and Holland; the sorrel cutworm and the dagger moth from France, England, and Holland; *Calophasia lunula* from France; *Agrilus viridis* var. *fagi* from France; *Lecanium coryli* from Holland; a sawfly (*Emphytus cinctus*) from England, France, Holland, Scotland, and Ireland; and others.

PLANT DISEASES.

A disease known as briar-scab of rose plants caused by *Botryosphaeria dothidea* has been epidemic in England. It causes cankers on the stems.

Sixteen rusts of rose plants have been reported. Four of these occur in Europe; three are native European; the fourth has apparently been introduced into Europe from the Orient.

Forty-two leaf-spots, leaf-blights, and stem-cankers of rose plants are known. Thirty-seven of these occur in Europe.

BULBS.

Forty-three species of insects were intercepted in various kinds of bulbs introduced from August 20, 1912, up to and including April 22, 1922. Perhaps one of the most injurious insects to arrive with foreign bulbs was a new species of Pseudorhianus in Amaryllis (*Sprekelia formosissima*) from Mexico. The infested bulbs in many instances were severely injured and rendered worthless. Nothing is known of the habits of this insect.

Lilium candidum from France was infested with *Cryptothrips dentipes*, and a species of Liothrips was collected on lily bulbs from the same country. *Gladiolus* sp. from South Africa was found to be infested with a weevil (*Orodon* sp.), new to the United States. A wireworm (*Limonius* sp.) was taken in Narcissus bulbs from Holland, and the Narcissus fly (*Merodon equestris*) and the lesser bulb fly (*Eumerus strigatus*) were intercepted on a number of occasions from France and Holland in the same host.

The bulb mite (*Rhizoglyphus hyacinthi*) was intercepted on the following: Amaryllis, crocus, galanthus, gladiolus, hyacinth, lilium, *Muscaria botryoides album*, narcissus, scilla, tigridia, and tulip. Information has recently been received to the effect that this mite has caused the loss of an entire crop of lilies in Colorado. What appears to be the same mite is reported to be causing considerable injury to smilax and asparagus ferns in Pennsylvania.

PLANT DISEASES.

Among the numerous foreign plant diseases threatening the bulb grower are the Narcissus nematode (*Tylenchus dipsaci*), so prevalent in Holland and England, five rusts of gladiolus known in Africa, a bacterial lily disease in Japan, and the yellow slime disease of hyacinths in France and Holland.

SOIL.

One hundred and sixty-eight kinds of insects have been intercepted in soil accompanying foreign plants arriving in the United States from August 20, 1912, up to and including April 22, 1922. Of this number there are a dozen or more species of insects new to this country and which are recognized as injurious pests in foreign countries.

A wireworm (*Agriotes lineatus*), which is considered a very injurious pest to cereal crops in Europe, was collected in soil from Finland. No less than three shipments of plants bearing soil around the roots were received from Holland and Ireland which were infested with an unrecognized species of Agriotes. In several instances State entomologists have reported wireworm larvæ in soil surrounding the roots of plants.

Perhaps one of the most important soil interceptions was the finding of *Leucotermes tenuis* Hagen in soil around plants arriving from Brazil. This termite is considered the most destructive species in the world, and has been found in Santo Domingo, the Bahama Islands, and Brazil. It is reported that this termite was introduced into the island of St. Helena and was so destructive at Jamestown, the capital, that new buildings had to be erected.

The so-called black vine weevil (*Brachyrhinus sulcatus*) was collected in soil which accompanied shipments of plants on several occasions. While this insect is established in the United States it is absent in many localities. It is recorded to feed in the larval stage on ferns and breeds at the roots of grape, strawberry, and many other plants. A closely related insect has also been collected in soil around conifers from Holland and in soil around Taxus, potted plants, and astilbes from Italy, Holland, England, and Japan.

No less than six genera of weevils belonging to the destructive family Scarabaeidæ have been intercepted on miscellaneous shipments. One of these which has been identified as a species of Adoretus is closely related to the Japanese rose beetle (*A. umbrosus* var. *tenuimaculatus*), which occurs in Hawaii, Fiji, Japan, and Java. This insect is injurious to citrus, rose, and grape in Hawaii, rose trees in Fiji, and sugar cane in Java, the adults devouring the foliage and the larvæ feeding on the roots.

No less than 16 species of ants, some of which are new to the United States, have accompanied soil around the roots of plants.

The European earwig (*Forficula auricularia*), which was introduced into the United States several years ago and is now responsible for considerable injury to plants and annoyance to people, has been collected in soil around evergreen shrubs from Holland. Undoubtedly this pest, as well as the European mole cricket, was introduced in soil accompanying plants.

E. R. Sasscer,
Entomologist in Charge, Plant Quarantine Inspection Service.

EUROPEAN RESTRICTIONS ON THE ENTRY OF PLANTS FROM AMERICA.

HB—151

May 15, 1922.

The question has been raised as to whether the European restrictions on living plants and plant products from America are still in full force and effect.

As to the correctness of the department's information on this subject it may be pointed out that the department is working constantly in cooperation with the plant quarantine inspection and control agencies of all foreign countries that have any commerce in plants with the United States, and that some 30 of these have enacted legislation at our request making provision for such cooperation. It would seem to be fairly reasonable to believe, therefore, that this department would be kept fairly promptly advised of any important changes in such legislation.

Furthermore, the department has secured from time to time, through the State department, both the text of such laws and also brief summaries of the laws and the current regulations with respect to such importations from America or elsewhere. The laws and digests on file in the Federal Horticultural Board of the department relate to some 30 countries.

The restrictions of European countries on entry of plants from America are of special interest. They began some 50 years ago in connection with the grape phylloxera, an American pest, and some 25 years ago these restrictions were extended by many European countries, on account of the San Jose scale, to a practical embargo against all kinds of living trees or shrubs or parts thereof. Such embargoes were substantially complete in the case of Holland,

France, Germany, Austria, and Switzerland. Restrictions in lesser degree were enforced by Belgium, Italy, Spain, Turkey, and Russia, and even other countries, as Great Britain, Norway, and Sweden, maintained restrictions against certain classes of plants. Several of these countries also, notably, Holland, Germany, and France, maintained very severe restrictions against entry of our fruits and fruit products. England has recently very much extended her restrictions on entry of plants from all foreign countries.

That these restrictions as to the important European countries involved in plant exportation to the United States are still maintained in full force and effect is indicated by the following summaries based on recent advices of the laws of Holland, Germany, France, Belgium, and England:

Holland.

Under date of April 21, 1922, the chief of the Netherlands phytopathological service, Dr. N. Van Poeteren, writes that no changes have been made in the San Jose scale order of 1899 or in the phylloxera order of 1883.

The complete laws of the Netherlands bearing on the control of insect pests and plant diseases were transmitted to this board through the State Department June 19, 1916.

The San Jose scale law prohibits the importation and transfer from America, direct or indirect, of all kinds of living trees and shrubs or living parts thereof, including boxes, kegs, barrels, or other objects which serve or may have served for packing.

Germany.

The information here given on the subject of the restrictions enforced by Germany relative to the importation of plants, fruits, etc., is based on a report from the Imperial Foreign Office of Germany, received through the State Department September 20, 1916.

This report indicates that the restrictions enforced by Germany cover living plants, fruits, etc., and also potatoes, and have for object prevention of the entry into Germany of the phylloxera, San Jose scale and the Colorado potato beetle.

The phylloxera decree relates to grape vines, etc., and is a part of the general action of Europe of some 50 years ago.

The importation of potatoes from America into Germany and also of any parts of the potato, packing, sacks, etc., was absolutely forbidden by the decree of February 26, 1875, on account of the Colorado potato beetle.

The San Jose scale decree, promulgated by Emperor Wilhelm February 5, 1898, prohibits the importation of living plants and parts of living plants from America, and barrels, boxes, etc., used for packing. It also prohibits fresh fruits or parts of fresh fruits, including packing material, crates, etc., when examination at port of entry shows the presence of the San Jose scale. The imperial chancellor is authorized to make exceptions under adequate safeguards. (This department has never been advised of any such exceptions.)

By amendments to this decree provision was made for the entry of dried or evaporated fruits without inspection.

The prohibitory features which first applied only to America were made applicable to Japan August 16, 1900, and to Australia June 3, 1907, in both instances again on account of the San Jose scale.

France.

In response to a request, the department received, under date of April 25, 1922, official advice from France that the decree of 1898 still governs the entry

of plants from the United States. This decree was issued November 30, 1898, on account of the San Jose scale and was amended the year following to include also Algiers.

DECREE PROHIBITING THE ENTRY AND TRANSPORTATION IN FRANCE OF PLANTS FROM THE UNITED STATES OF AMERICA.

Article 1 of this decree forbids the entry into France of trees, shrubs, nursery stock, cuttings, and all other living plants or parts thereof, as well as fresh plant débris coming from the United States of America, either directly or via other countries.

Article 2 has relation to importations of fresh fruits from the United States and packing and containers of the same and provides that if such importations on inspection are determined to be infested by the San Jose scale, either as to fruits or as to packing material, the shipment shall be forbidden entry into France, together with the crates and packing, and for this purpose the examination shall be made at the port of arrival.

Article 3. The ministers of agriculture and finance are charged with the execution of this decree.

The control on account of phylloxera of the movement of vines and cuttings thereof, dates in its final form from the International Phylloxera Convention at Bern of November 3, 1881, but the control now exercised on account of the San Jose scale covers in its terms grapevines as well as other plants.

Belgium.

The general restrictions on the importation of fresh fruits and living plants into Belgium, indicated in the latest edition (1912) of the Belgian laws in the possession of the department, are as follows:

(1) The importation of plants attacked by insects or diseases is prohibited.

(2) The minister of agriculture may order the rejection of imported plants or may restrict, in cooperation with the minister of finance, their entry to certain ports.

(3) In the case of grave dangers the minister of agriculture may prohibit the entry of certain kinds of plants coming from designated countries or he may, in lieu thereof, require that the plants be accompanied by a certificate certifying that the plants presented for importation originated in districts free from infestation with dangerous insects and diseases and that the shipment itself is free from such infestation. Furthermore, the control (inspection or rejection, etc.) of such shipments shall be made at the frontier or at arrival.

(4) In case any such shipments are found after they reach the interior of the country to be attacked by insects or diseases the minister of agriculture has a right to prescribe their destruction at the expense of the importer and without indemnity.

The regulations under these laws indicate that entry of fresh fruits, living plants, and fresh parts of plants sent from the United States can take place only by ports of Antwerp, Ghent, and Ostende upon production of a certificate from competent authority, as required under numbered paragraph 3 above. If not accompanied by such certificate, products may not be delivered until inspected, and if not exempt must be destroyed with packings; cost of all service at expense of importer. This requirement does not apply to shipments in direct transit to other countries by railway under supervision of customs authorities.

England and Wales.

The restrictions on the entry of plants into England and Wales from countries other than Scotland, Ireland, and the Channel Islands were materially

extended under the destructive insect and pest order promulgated May 31, 1921, by the Ministry of Agriculture and Fisheries of England.

Under this order both plants and plant products on which dangerous pests may be introduced are admitted only when accompanied by a certificate issued by an official of the country of export that the plants or plant products are healthy and free from the pests mentioned in a subjoined schedule. Plants offered for entry from countries which do not maintain a system of inspection are admitted only after they have been examined by an inspector of the ministry and found to be healthy and free from the pests mentioned in the schedule.

This schedule lists some 17 different insect pests and 6 fungous diseases. The enforcement of the order is provided for under a series of regulations.

Provision is also made for the entry of plants under a general license issued by the minister of agriculture and fisheries and to consignments to such minister for experimental or scientific purposes.

C. L. Marlatt,
Chairman of the Board.

PLANT INSPECTION REQUIREMENTS OF ENGLAND AND WALES.

(For information of State inspectors.)

May 22, 1922.

Dear Sir: As you may have been advised, the restrictions on the entry of plants into England and Wales from countries other than Scotland, Ireland, and the Channel Islands were materially extended under the destructive insect and pest order promulgated May 31, 1921, by the Ministry of Agriculture and Fisheries of England. W. G. Lobjoit, controller of horticulture of said ministry, who attended the conference regarding Plant Quarantine 37 in Washington May 15 and 16, advises me that to avoid holdups and difficulties of entry the inspection tag should show that the plants are healthy and free from the scheduled pests. The scheduled pests referred to are as follows:

Fungi:

Black knot of plum and cherry (*Plowrightia morbosa*, Sacc.).
Pear blight (*Bacillus amylovorus*, De Toui).
Chestnut canker (*Endothia parasitica* (Murr.), Ander. & Ander.).
Wart disease of potatoes (*Synchytrium endobioticum*, Perc.).
Onion and leek smut (*Urocystis cepulae*, Frost).
Downy mildew of hops (*Peronoplasmopara humuli*, Miy. et Taka).

Insects:

Vine louse (*Phylloxera vastatrix*, Planch).
American apple capsids (*Heterocordylus malinus*, Reut. and *Lygidea mendax*, Reut.).
Pear tingid (*Stephanitis pyri*, Fab.).
Colorado beetle (*Leptinotarsa decemlineata*, Say.).
Plum curculio (*Conotrachelus nenuphar*, Herbst.).
Potato moth (*Phthorimesa operculella*, Zell.).
American lackey moths (*Malacosoma americana*, Fab. and M. *diastri*, Hubn.).
Oriental fruit moth (*Cydia molesta*, Busck.).
San Jose scale (*Aspidiotus perniciosus*, Comst.).
Japanese fruit scale (*Diaspis pentagona*, Newst.).
Apple fruit fly (*Rhagoletis pomonella*, Welsh).
Cherry fruit flies (*Rhagoletis cerasi*, Linn., *R. cingulata*, Loew., and *R. fausta*, Osten-Sacken).
Gooseberry fruit fly (*Epochra canadensis*, Loew.).

The character of nursery stock for which this form of inspection is required includes all living plants with a persistent woody stem above ground, and parts of the same, except seeds, when for use in propagation, such as fruit trees, stocks, and stools, forest trees, and ornamental shrubs and grafts, layers, and cuttings thereof.

With respect to onion and leek seed, Mr. Lobjoit points out that the certificate now issued to the effect that "the seed is, to the best of my belief, free from *Urocystis cepulae*," is hardly sufficient for protection and the British ministry would be glad if, in addition, it could be certified that the plants which produced the seed had been inspected while growing during the months of May to August and were found to be healthy and free from *Urocystis cepulae*.

It is suggested that all of your inspectors be notified of these requirements Inasmuch as no Federal inspection of such material is possible, foreign governments have been advised that they must rely on State inspection; in other words, such inspection as can be made of the actual material at the time of packing or other proper time, and therefore be valid and reliable.

Yours very truly,

C. L. MARLATT,
Chairman, Federal Horticultural Board.

REVISED REGULATIONS PROPOSED BY HOLLAND TO GOVERN HER PLANT EXPORTS.

APRIL 8, 1922.

The honorable the SECRETARY OF STATE.

DEAR MR. SECRETARY: I have your letter of March 29 (WE–856.612/2), transmitting a note from the minister of the Netherlands in Washington, inclosing a copy of the rules and regulations proposed by his Government as possibly acceptable to the American Government as a basis for the entry of plants from Holland now excluded from importation into the United States under Quarantine 37.

You are advised that these proposed rules and regulations have been given very careful consideration by the experts of this department having charge of such matters and that it is not believed that they will afford safeguards which will warrant the relinquishment of the restrictions now being enforced under Quarantine 37 on the entry of plants from Holland and other foreign countries. While these proposals may make the control a little more rigid than heretofore, they do not involve any new safeguards of real importance. For example, freedom from earth has been required since the establishment of Quarantine 37, and also the conditions of inspection at the time of packing. The requirements as to freeing plants from pests and for destroying, as far as possible, soil-infesting pests are in line with the steps which have been required in the past. The experts of this department are thoroughly familiar with these methods of control and realize their considerable value, but abundant experience has indicated that the results of control work of this nature can not be accepted as an elimination of the risk of entry of new pests with plants so treated and safeguarded.

The freeing of plants from pests has been a condition of exportation of plants to the United States since the passage of the plant quarantine act in 1912; and, for the information of the Netherlands Government, it may be pointed out that during the period from 1912 to 1922 there have been intercepted on importations of plants from Holland no less than 183 different kinds of insects. Some of these insects have been intercepted on upward of 1,100 separate shipments! Furthermore, such interceptions have continued even under the restrictions enforced in the last three years under Quarantine 37; but, for that matter,

during the entire period of control of plant entry—nearly 10 years—these interceptions have been practically limited to findings on the aerial parts of the plants, inasmuch as it was not possible during the period when soil was admitted to make examinations of the soil. These interceptions therefore indicate what may still be expected with shipments even without soil, and, in fact, such interceptions are being made all the time on plant material coming from Holland and other countries. Many of these interceptions are of pests of known large importance, new to the United States. The board has on file long lists of pests thus intercepted with bulb importations, with rose importations, and with importations of other ornamentals. There is no question but that the foreign plant inspection officials are doing their best to have plant material exported to the United States clean and free from infestation, but the condition of shipments now arriving from Holland and other countries indicate what has been long demonstrated—that inspection and disinfection is not a safeguard which can be relied upon as adequate.

The fact that Holland is the most favored country under Quarantine 37 was pointed out in my letter to you of March 29, and perhaps this information here reproduced may properly be submitted to the minister of the Netherlands. This status comes in part from the fact that Holland is the principal producer of lily and other bulbs permitted unlimited entry under Quarantine 37. For example, the importations of bulbs from Holland for the fiscal year 1921 amounted to upward of 115,000,000 bulbs out of a total from all countries of the world of approximately 192,000,000, or almost 60 per cent of the total, in which 11 exporting countries are concerned. It may be noted that the quarantine places restrictions as to importations of bulbs on less than 10 per cent of the bulbs previously imported into the United States and, furthermore, permits of this 10 per cent such importation as is necessary of those classes of bulbs for introduction or propagation purposes, and of this class also the bulk of the importations comes from Holland.

In addition to bulbs, Holland is the largest exporter to the United States of rose stocks and the second largest exporter of fruit stocks, both of these items being open to unlimited importation under the quarantine. Furthermore, the restricted plants imported under special permit come in considerable percentage from Holland. Of all countries, therefore, Holland has least grounds for complaint on account of Quarantine 37.

Respectfully,

HENRY C. WALLACE, *Secretary.*

MAIL IMPORTATIONS OF SPECIAL PERMIT MATERIAL.

CONDITIONS GOVERNING IMPORTATION BY MAIL OF PLANTS UNDER SPECIAL PERMITS.

MARCH 4, 1922.

The DIRECTOR OF THE INTERNATIONAL BUREAU
OF THE UNIVERSAL POSTAL UNION,
Bern, Switzerland.

MY DEAR SIR: By direction of the Postmaster General, I have the honor to refer to the prohibition against the importation into the United States in the mails (including the parcel post) of plants and seeds for propagation, except field, vegetable and flower seeds, and importations made by the United States Department of Agriculture, as communicated to the various countries of the Postal Union through the bureau and published in the United States Official Postal Guide. (See section 180, on p. 138 of the Postal Guide for 1921).

It has been decided by the Department of Agriculture to allow the importation in the mails, that is to say, by parcel post, of certain plant material covered by a special regulation of the United States Department of Agriculture,

which importations will hereafter be authorized only on request and when warranted by the nature and amount of the proposed shipment; such authorization to be indicated by a special permit which will be indicated by a specially prepared tag or label supplied to the proposed importer in the United States, who in turn will forward the tag to the intended shipper, such tag or tags, which will bear the number of the permit, to be affixed to the parcel or parcels containing the authorized plant importation.

The above-mentioned tag is not intended, of course, to supersede the customs declaration required to be affixed to parcels for the United States, but to assure their entry into this country and their special treatment under the arrangements made in this service when the parcels are fully postage paid and prepared in accordance with the prescribed regulations of the particular country concerned.

I beg to request, therefore, that the postal administrations of the countries of the union be advised of the foregoing exceptional provision, and to inclose herewith a supply of the tags referred to, in order that a sample may be furnished in each case. It will be noted that the tags are addressed to the United States Department of Agriculture, Federal Horticultural Board, Washington, D. C. (those furnished for use in trans-Pacific countries being addressed to San Francisco, Cal.), this course having been followed in order to assure appropriate inspection of the plant material in question, after which the packages will be sent onward by mail, without charge for additional postage, for delivery to the ultimate consignee upon compliance with the customs regulations.

It will be noted the foregoing relates to the parcel post, and while the Parcel Post Service maintained by this department is provided for by means of separate conventions or arrangements with each country, it is hoped you will cause the information now communicated to be made the subject of an appropriate circular.

Respectfully yours,

EDWIN SANDS, *Superintendent*,
(For the Second Assistant Postmaster General.)

IMPORTATION BY PARCEL POST OF CERTAIN PLANT MATERIAL UNDER SPECIAL PERMIT OF DEPARTMENT OF AGRICULTURE.

MARCH 14, 1922.

Arrangements have been made with the Post Office and Treasury Departments by the Department of Agriculture (Federal Horticultural Board) to allow the importation by parcel post of certain plant material under a special permit of the Department of Agriculture (provided for in regulation 14 of Quarantine 37), such importations to be accompanied by tags specially prepared for the purpose to show thereon the permit number of the Department of Agriculture.

In case importation by parcel post is desired of any heretofore prohibited plant material the importer should make application to the Department of Agriculture (Federal Horticultural Board), Washington, D. C., for a permit to import, indicating in the application the approximate weight of the plant material to be imported or the number of packages necessary to contain it, whereupon the applicant, in case his application is approved, will be furnished with a permit accompanied by a sufficient number of tags for transmission to the foreign shipper.

All packages of plant material bearing permit tags, upon receipt in this country, will be promptly dispatched to Washington, D. C. (to San Francisco, Calif., if received at a Pacific coast exchange office) for inspection under the plant quarantine act, after which, if found free of insects and diseases and conform-

ing to customs regulations, they will be sent to the importer (or permittee) as soon as practicable. Parcels of prohibited plant material which do not bear the special tags above referred to will be disposed of in accordance with the regulations applicable thereto.

Customs duty, if any, will be collected upon delivery.

Section 180, on pages 138 and 139 of the Postal Guide for July, 1921, is modified accordingly.

_____ _____,

Acting Second Assistant Postmaster General.

INQUIRY RE PRODUCTION OF BULBS IN THE UNITED STATES.

MAY 20, 1922.

DEAR SIR: The Federal Horticultural Board and department have been willing from the beginning, as announced at various times, to consider constructive suggestions relative to the bulb item under regulation 3, and one of the outcomes of the conference was an arrangement for a later conference with bulb importers and bulb users to determine what additions, if any, were justified to the existing list of bulbs in regulation 3 and also for a consideration of the status of the bulbs already included in this list. Preliminary to such conference it seemed desirable to get some definite information concerning certain classes of bulbs from persons whom the board and department have reason to believe are interested in the subject as bulb producers.

The information in the possession of the department would seem to indicate that the tuberous-rooted begonias and gloxinias are not being produced in this country in adequate quantities and probably will not be so produced in the near future.

Similar representation has been made with respect to Muscari (grape hyacinth), Scilla (squills), Chionodoxa (glory-of-the-snow), Galanthus (snowdrop), and Eranthis (winter aconite).

It has been suggested that the department should open to importation in unlimited quantities under the conditions of regulation 3 of Quarantine 37 the seven kinds of bulbs and tubers mentioned for a limited period of time, possibly three or five years, during which time American growers could prepare to meet the demand for this material. The department would like to have your point of view relative to such action with respect to any or all of the classes of bulbs enumerated. In making this or any other changes the department wishes to take into full consideration the steps that have already been taken by various American growers to make any of these bulbs or tubers available by American production.

Will you please inform us as to any action which may have been taken by you looking toward the American production of any of this material?

Were you propagating any of these plants before Quarantine 37 became effective on June 1, 1919? If so, what kinds and in what quantities?

What varieties are you now growing and what quantities do you have?

How rapid multiplication are you securing?

Have you any other information which the board should consider in connection with this proposal?

This inquiry is merely preliminary to the conference on the subject referred to above, which the board hopes to hold early in October at a date to be definitely announced later, in which all bulb importers and growers will be given an opportunity to participate. Furthermore, the items herein enumerated do not indicate any limitation on the consideration of other bulbs.

The board will be glad to receive from you the names and addresses of any other American bulb growers who can furnish information on this subject.

A prompt reply will be greatly appreciated.

Very truly yours,

C. L. Marlatt,
Chairman of Board.

THE PINK BOLLWORM.

QUARANTINE ON ACCOUNT OF THE PINK BOLLWORM.

NOTICE OF QUARANTINE No. 52.

(Effective on and after September 10, 1921. Supersedes Notice of Quarantine No. 46, as amended.)

The fact has been determined by the Secretary of Agriculture, and notice is hereby given, that an injurious insect, the pink bollworm (*Pectinophora gossypiella* Saunders), new to and not heretofore widely prevalent or distributed within and throughout the United States, exists in the States of Texas, Louisiana, and New Mexico.

Now, therefore I, H. C. Wallace, Secretary of Agriculture, under authority conferred by section 8 of the plant quarantine act of August 20, 1912 (37 Stat. 315), as amended by the act of Congress approved March 4, 1917 (39 Stat. 1134, 1165), do hereby quarantine the States of Texas, Louisiana, and New Mexico, and by this Notice of Quarantine No. 52 do order that cotton, including all parts of the plant, seed cotton, cotton lint, linters, gin waste and all other forms of cotton lint, cotton seed, cottonseed hulls, cottonseed cake and meal, bagging and other containers of the articles enumerated, and also railway cars, boats, and other vehicles which have been used in conveying cotton and cotton products grown in the States named or which are fouled with such products, hay and other farm products, farm household goods and farm equipment, shall not be moved or allowed to be moved interstate from the said quarantined States in manner or method or under conditions other than those prescribed in the rules and regulations hereinafter made and amendments thereto: *Provided*, That the restrictions of this quarantine and the rules and regulations supplemental thereto may be limited to the areas in a quarantined State now or hereafter designated by the Secretary of Agriculture as infested areas and regulated areas when said State shall have provided for and enforced such control measures with respect to such designated areas as in the judgment of the Secretary of Agriculture shall be deemed adequate to effect the control and prevent the spread of the pink bollworm, or until the Secretary of Agriculture shall have determined that dangerous or infested material is being carried out of such designated areas.[1]

Done in the District of Columbia this 19th day of August, 1921.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.]

Henry C. Wallace,
Secretary of Agriculture.

REVISED RULES AND REGULATIONS SUPPLEMENTAL TO NOTICE OF QUARANTINE NO. 52.

(Effective on and after May 1, 1922.)

Regulation 1.—Definitions.

For the purposes of these regulations the following words, names, and terms shall be construed, respectively, to mean:

(*a*) Cotton and other articles: Cotton, including all parts of the plant, seed cotton, cotton lint, linters, gin waste and all other forms of cotton lint, cotton

[1] See Appendix.

seed, cottonseed hulls, cottonseed cake and meal, bagging and other containers of the articles enumerated, and also railway cars, boats, and other vehicles which have been used in conveying cotton and cotton products grown in the infested districts or which are fouled with such products, hay and other farm products, farm household goods, and farm equipment.

(*b*) Pink bollworm: The insect known as the pink bollworm of cotton (*Pectinophora gossypiella* Saunders).

(*c*) Quarantined area: Any State, or any portion thereof, quarantined by the Secretary of Agriculture upon determination by him that the pink bollworm exists therein.

(*d*) Infested area: Those portions of any quarantined area which are determined by the Secretary of Agriculture to be infested with the pink bollworm.

(*e*) Regulated area: Those portions of any quarantined area in which the growth of cotton is permitted under the restriction that the crop shall be under the full control of the State authorities in cooperation with the United States Department of Agriculture for the purpose of enforcing any safeguards that shall be determined to be necessary with respect to the disposition and movement of the crop.

(*f*) Inspector: An inspector of the United States Department of Agriculture.

Regulation 2.—Cotton and other articles subject to restriction.

The restrictions on the movement of cotton and other articles covered in this Notice of Quarantine No. 52 and in the rules and regulations supplemental thereto shall apply to all products and articles enumerated in the notice of quarantine originating in or moving from the areas in the quarantined States now or hereafter designated by the Secretary of Agriculture as infested or regulated areas.

No restrictions are placed by this quarantine and the regulations supplemental thereto on the interstate movement of the articles enumerated therein from all points in the quarantined States outside of the areas now or hereafter designated by the Secretary of Agriculture as infested or regulated areas.

Regulation 3.—Infested areas.

The following districts in Texas, Louisiana, and New Mexico are designated as infested areas:

TEXAS.—All that certain territory included within a circle with a radius of 1 mile, its center being the gin at Marilee Station, on or near the Collin-Grayson County line, and being on the St. Louis & San Francisco R. R., such territory being a part of Collin and a part of Grayson Counties of the State of Texas.

All that certain territory being a part of Liberty County of the State of Texas and included within the following described boundaries, to wit:

Beginning on the Liberty-Wallisville road at a point where a bridge crosses Redmond Creek, north and near Volcour La Cour's residence; thence with said Redmond Creek in a westerly direction to Self Bayou; thence with Self Bayou to the Trinity River; thence with the Trinity River in a southerly direction in its meandering course to the Liberty and Chambers County line; thence with the Liberty and Chambers County line easterly to the Liberty-Wallisville road; thence with said road north to the point of beginning.

And that part of Ellis County included within the following described boundaries, to wit:

Beginning where the Ennis and Telico public road crosses the city limits of Ennis immediately behind the Dr. Loggin's residence; thence in a northwesterly direction and continuing with said city limits all the way around said city limits to a point about where Ennis-Bardwell public highway intersects

Madison Street, said Madison Street being on the extreme south of city limits; following said Madison Street and city limits to a point where said line and street crosses Cumming's Creek; thence down Cumming's Creek with its meanderings to the south corner of the J. D. Shegog tract on the bank of said creek; thence with the south line of the J. D. Shegog tract to where it intersects Ennis-Oak Grove public road; thence south down said public road to the northwest corner of the J. A. Sweatman tract; thence in an easterly direction with Sweatman's north line to the Ennis-Rice middle road; thence north with Ennis-Rice middle road crossing interurban to a point where it intersects Ennis-Corsicana highways; thence in a southeasterly direction with the Ennis-Corsicana highway to a point where the Walker's Creek road leaves the Ennis-Corsicana highway; thence east with the Walker's Creek public road to where the upper and old Porter's Bluff road intersects; thence with said Porter's Bluff road in a northerly direction to where said road intersects Ennis-Creechville public road; thence east with the said Creechville road to a ravine on the old Soap place; thence in a northwesterly direction with this ravine to where it empties into Cottonwood Creek; thence up Cottonwood Creek to the northeast corner of the Edgar Kendall tract; thence with Kendall's north line in a northwesterly direction to the intersection of the Ennis and Telico public road; thence in a southerly direction with the Ennis-Telico public road to the city limits and the place of beginning, immediately behind the Dr. Loggin's residence.

And that part of Ellis County included within the following-described boundaries, to wit:

Beginning at the southwest corner of Wm. M. McKinney survey, about 3 miles southwest of Ennis, where the Loli schoolhouse and Allen schoolhouse public road crosses the McClain Branch; thence southwest, with said public road, crossing the Ennis-Corsicana highway at John Champion's residence where the tile silo stands; thence on in a southwesterly direction with said schoolhouse road to a point where said road intersects the old Allen Lake and Ennis public road; thence northwest with said Allen Lake public road to the corner of the old R. C. Collin's farm; thence in an easterly direction with the north line of the Collin's and McClain land passing the McClain meadow; thence continue in the same direction on line between McClain and John Sonka to a point where division line crosses McClain Branch; thence with McClain Branch in a southeasterly direction to the place of beginning.

All of the counties of Presidio, Brewster, El Paso, Hudspeth, Pecos, Ward, and Reeves.

Louisiana.—The Shreveport area, including those portions of Caddo and Bossier Parishes bounded by a line running from the Red River west along the north line of section 14, T. 18 N., R. 14 W. to the northwest corner of said section; thence south along the west lines of sections 14, 23, 26, and 35, T. 18 N., R. 14 W., to the southwest corner of section 35, T. 18 N., R. 14 W.; thence west along the north line of T. 17 N., R. 14 W., to the northwest corner of said township; thence south along the entire length of the west line of T 17 N., R. 14 W.; thence east along the entire length of the south line of T. 17 N., R. 14 W., and continuing due east on the same straight line to the west bank of Bayou Pierre; thence following the west bank of Bayou Pierre in a northerly direction to the point where this bayou joins Red River east of Shreveport; thence across Red River to the point where the east line of section 33, T. 18 N., R. 13 W., touches Red River, thence north along the east lines of sections 33, 28, 21, and 16, T. 18 N., R. 13 W., to the northeast corner of section 16, T. 18 N., R. 13 W.; thence west along the south lines of sections 9, 8, and 7,

T. 18 N., R. 13 W., and continuing due west along the same straight line to the east bank of Red River; thence across Red River to the point where the north line of section 14, T. 18 N., R. 14 W., touches the west bank of Red River, the point of beginning.

NEW MEXICO.—All of the counties of Dona Ana and Eddy.

Regulation 4.—Regulated areas.

The following districts in Texas, Louisiana, and New Mexico are designated as regulated areas:

TEXAS.—All of the counties of Maverick, Kinney, and Val Verde.

Those parts of Collin and Denton Counties included within the following described boundaries, to wit:

Beginning at the Grayson, Denton, and Collin County line, which is the northwest corner of Collin County; thence south along the Collin and Denton County line to the southeast corner of the Light Ranch; thence west with the south boundary of said ranch following the public road to the northeast corner of the Isaac Walters survey; thence south to a steel bridge on Mustang Creek on a public road known as the Celina and Mustang Road; thence south and west following the east bank of Mustang Creek to where it empties into Little Elm Creek; thence south on Little Elm Creek to a steel bridge on the public road known as the Aubrey and Parvin road; thence east on said road to the Mustang and Elm Bridge public road; thence south to the Parvin and Navo public road; thence east following said road to Parvin and Collin County line; thence north and east following the Parvin and Rheas Mill public road to the northeast corner of the John Greenwood farm; thence south following the public road to the northwest corner of the William Butler survey; thence east following public road to the Dallas and Preston road; thence north following said road to the Parvin and Rheas Mill road; thence east to the southwest corner of the Rhea farm; thence north and east to the Celina-McKinney Pike; thence to Twin Bridges on the public road; thence east to a point on the Charles Gilmer survey public road; thence north to the southwest corner of the Caleb Hart survey, No. 3978; thence east to point on the west boundary line of Grizzell Kennedy survey; thence north and east to southwest corner of Andrew Culwell survey; thence due north, following west boundary lines of the following surveys: Andrew S. Culwell, W. M. Culwell, William Warden, James Sarago, Joe Mitchum, James Heffelfinger to Grayson County south boundary line; thence west along said Grayson and Collin County line to place of beginning.

And that part of Grayson County included within the following described boundaries, to wit:

Beginning at a point on the Grayson and Collin County line, where East Fork Creek crosses the county line from Grayson County to Collin County; thence up East Fork Creek to a point where Bradford Creek runs into East Fork Creek; thence up Bradford Creek to a point on the north line of B. R. Brooks 123-acre tract; thence west through the Mary Miller survey to the southeast corner of J. S. Thom survey, Abstract No. 1189; thence north to the Collinsville and Dorchester Pike road; thence west with said Pike road to west line of said J. S. Thom survey; thence north with west line of said J. S. Thom survey to the northwest corner of said survey; thence west on a straight line to the northeast corner of the J. J. Ward survey, Abstract No. 304; thence west with north line of J. J. Ward survey to the northwest corner of said survey; thence south on the west line of the said Ward survey to Range Creek; thence down Range Creek to the north line of G. R. Bone survey, Abstract No. 118; thence west with north line of said Bone survey to the northwest corner of said survey;

thence south with the west line of said Bone survey to the southwest corner of said survey, continuing this line south to Range Creek; thence down Range Creek to the west line of the H. Eakes survey, Abstract No. 386; thence south with the west line of said H. Eakes survey to the southwest corner of same; thence south to Liberty Hill schoolhouse; thence continuing south with the Gunter and Tioga Pike road to a point where same road turns east, and continuing south through the S. A. & M. G. R. R. survey, Abstract No. 1143, to the northwest corner of R. E. Hayes survey, Abstract No. 550, to Buck Creek; thence south making a south line from the H. Eakes survey, Abstract No. 386, to Buck Creek on the R. E. Hayes survey; thence down Buck Creek to a point near the northwest corner of J. D. Thomas survey, Abstract No. 1213; thence south on the west line of J. D. Thomas survey to the southwest corner of said survey, and continuing south to the south line of Grayson County; thence east along south boundary line of Grayson County to place of beginning.

That part of Ellis County included within the following described boundaries, to wit:

Beginning at a point on Waxahachie Creek where Ellis and Navarro County line crosses said creek; thence up Waxahachie Creek with its meanderings to a wooden bridge on the public road leading from the Ennis and Waxahachie highway to Howard, known as the Old Blackman bridge, which is also the corner between R. W. Getzendaner and T. N. Templeton; thence in a northerly direction with said Getzendaner east line and west Templeton line crossing the Ennis public highway, continuing in the same direction 600 yards; thence in a westerly direction 350 yards to a public road running from the Waxahachie-Ennis highway to Bethal schoolhouse and to a connection of the Ennis-Waxahachie-Ferris road, which is the southwest corner of the Thomas Norvell survey; thence in a northeasterly direction with the public road and the south line of the Thomas Norvell and R. Mayfield survey to the southwest corner of the C. Cullum; thence northwest with the west line of C. Cullum to the southwest corner of the M. W. Dameron survey; thence east with the south line of the Dameron survey to a point where it intersects the west line of the T. B. May survey, which is also the southeast corner of the Dameron survey, and a public road running from Garrett to Boyce; thence up the east line of the Dameron survey with the public road to where it intersects a public road running parallel to the Houston & Texas Central R. R.; thence east with the Houston & Texas Central R. R. to a public road leading from the northeast corner of the T. B. May survey near the railroad north to the Waxahachie-Boyce-Ennis highway; thence east with the Waxahachie-Ennis public highway to the point near the southeast corner of the Eady Jordan survey and the southwest corner of the D. E. Hays place, where a public road leaves the Ennis-Waxahachie highway; thence with the said public road in a northerly direction between the east line of the Jordan survey and the west line of the Hays survey to a point where said road crosses Boyce or Cottonwood Creek; thence with the meanderings down said creek to the Houston & Texas Central R. R.; thence in a southeast direction with base line of R. de la Pena 11 League Grant to a point in said line that is the southwest corner of the northwest quarter of the northwest quarter of section 16 of said R. de la Pena grant; thence in a northeasterly direction with the south line of the northwest quarter of the northwest quarter No. 2 and the northeast quarter of the southwest quarter and the northeast quarter of the northwest quarter No. 1 of section 16 of said grant; thence with south line of the northwest quarter of the northwest quarter No. 2 of section 15 of said grant to the Palmer and Garrett public road; thence southeast direction with said public road to a point to the southwest

corner of southwest quarter of the southwest quarter No. 2 of section 15 of said grant; thence with south line of the southwest quarter and the southeast quarter of the southwest quarter No. 3 of section 15 of said grant; thence in said direction to a point in the east line of the southwest quarter No. 3 of section 15, being the southeast quarter of the southeast quarter of the southwest quarter No. 3 of section 15 of said grant; thence down the east line of the southwest quarter No. 3 of section 15 to the Ennis-Bristol upper road; thence northeast with said road to the northeast corner of the northeast quarter No. 1 section 10 of said grant; thence southeast with east line of the northeast quarter No. 1 of said grant, section 10, to a public road; thence in a westerly direction with said road to where a public road intersects, being on the south line of the northwest quarter No. 2 of said grant, section 10, and the north line of the southwest quarter No. 3 of said grant, section 10; thence in a southeast direction with said road to the Texas Midland R. R.; thence south along Texas Midland R. R. to a point in Village Creek where the Texas Midland R. R. crosses; thence down Village Creek with its meanderings in a general easterly direction to where it empties into Trinity River; thence down Trinity River to the Navarro County line; thence with the Navarro County line in a southeasterly direction where it crosses Waxahachie Creek to place of beginning.

All of the counties of Orange, Jefferson, Chambers, and Galveston (except the Island of Galveston therein), and the portions of Brazoria, Fort Bend, Harris, Liberty, Newton, Jasper, and Hardin Counties, included within a line extending from the mouth of Chocolate Bayou northward along the bayou to the bridge where the Elby Knappe Road crosses the bayou south of Alvin near the S. T. Angier survey; thence in a westerly direction to Sandy Point on the International & Great Northern Railway; thence west to the Brazos River; thence north along the Brazos River to the Gulf, Colorado & Santa Fe Railway bridge west of Arcola; thence in a northeasterly direction to the intersection of the Fort Bend, Brazoria, and Harris County lines south of Almeda; thence along Clear Creek to the Santa Fe crossing north of Pearland; thence northward along said railroad to the Simms Bayou; thence northeasterly along Simms Bayou to Buffalo Bayou; thence along Buffalo Bayou to the San Jacinto River; thence northward along the San Jacinto River to the Gulf Coast Railway; thence northeasterly along the Gulf Coast Railway to the Harris-Liberty County line; thence along the Liberty and Harris County line to Luce Bayou on the Ed. King survey; thence along Luce Bayou in a northeasterly direction to the northeast corner of the Thomas Garrett survey; thence in a northerly direction along the east side of the Hugh Means survey and the J. R. Fault survey to the southwest corner of the Manuel de los Santos Coy survey; thence east along the south line of the Santos Coy survey to the Hardin County line; thence southeast along the Hardin and Liberty County line, following that line to the east line of Liberty County; thence northeastward to the town of Kountze; thence northwestward along the Texas & New Orleans Railway to the south line of Tyler County; thence due east along the south line of Tyler County and continuing due east across Jasper and Newton Counties to the Sabine River; thence southward along the Sabine River to its mouth, except that part of Liberty County designated in regulation 3 hereof.

LOUISIANA.—All of the parish of Cameron.

Those portions of Jefferson Davis and Calcasieu Parishes described as follows: Beginning at the northeast corner of T. 9 S., R. 4 W., in Jefferson Davis Parish, running south along eastern boundary of said township to its southeastern corner; thence southward along the eastern boundary of T. 10 S., R. 4 W., to the point where this boundary crosses Bayou Chien; thence in a gen-

erally westward direction along Bayou Chien to its confluence with Bayou Lachassine; thence northward along Bayou Lachassine to the southern boundary of section 20 in T. 10 S., R. 5 W.; thence westward along the southern boundaries of sections 19, 24, 23, 22, and 21 to the western line of Jefferson Davis Parish; thence westward in Calcasieu Parish along the southern boundaries of sections 20, 19, 24, 23, 22, and 21 to T. 10 S., R. 7 W.; thence southward along western boundary of T. 11 S., R. 7 W., to the southwestern corner of section 16 in said township; thence westward along southern boundaries of sections 17 and 18 in said township and along southern boundaries of sections 24, 23, 22, 21, 20, and 19 of T. 11 S., R. 8 W.; thence westward to the southwestern corner of section 24 in T. 11 S., R. 9 W.; thence north to the northwestern corner of section 13 in T. 10 S., R 9 W.; thence eastward to Bayou Contraband; thence along bayou in a northwesterly direction to Calcasieu River; thence northward along Calcasieu River and Lake Charles to the Southern Pacific Railway; thence eastward along Southern Pacific Railway to the western boundary of T. 9 S., R. 7 W.; thence northward along western boundary of said township to Calcasieu River; thence in a northeasterly direction along Calcasieu River to mouth of Bayou Arsand; thence along the course of Bayou Arsand to the eastern boundary of Calcasieu Parish; thence continuing in Jefferson Davis Parish along southern boundaries of sections 30, 29, 28, 27, 26, and 25 in T. 8 S., R. 6 W., to the eastern boundary of said township; thence south along the western boundary of T. 8 S., R. 5 W., to the southern boundary of said township; thence due east along southern boundaries of T. 8 S., R. 5 W., and T. 8 S., R. 4 W., to the point of beginning.

All of those portions of the following townships about Shreveport not included in infested areas in regulation 3: T. 17, R. 13; T. 18, R. 13; T. 18, R. 14; T. 17, R. 14; and in addition thereto, sections 1, 2, 3, 4, 5, and 6 of T. 16, R. 14; as well as sections 1, 12, 13, 24, 25, and 36 of T. 17, R. 15.

NEW MEXICO.—All of the counties of Chaves, Curry, Roosevelt, and Lea.

Regulation 5.—Extension or reduction of infested and regulated areas.

The infested areas and regulated areas designated in Regulations 3 and 4 may be extended or reduced as may be found advisable by the Secretary of Agriculture. Due notice of any extension or reduction and the areas affected thereby will be given in writing to the transportation companies doing business in or through the State in which these areas are located and by publication in newspapers selected by the Secretary of Agriculture within the States in which the areas affected are located.

Regulation 6.—Control of cotton and other articles.

The interstate movement of seed cotton and the stalk and other parts of the cotton plant is prohibited.

The interstate movement of cotton lint, linters, gin waste and all other forms of cotton lint, hulls, cake, meal, and bagging and other containers which have been used in connection with such articles, and also railway cars, boats, and other vehicles which have been used in conveying cotton and cotton products grown in the regulated or infested districts or which are fouled with such products, hay and other farm products, farm household goods and farm equipment, will be allowed only under permit issued by the Secretary of Agriculture and upon compliance with conditions to be prescribed in such permit.

The interstate movement of cotton seed from the infested or regulated areas will be allowed only under permit issued by the Secretary of Agriculture and upon compliance with the following conditions:

1. Permits will be issued only for shipments of seed from one regulated area to another regulated area and only when such shipments can be routed

so as not to pass through any cotton-growing territory which is not under regulation.

2. Permits will be issued for interstate shipments of cotton seed from quarantined territory only when the seed has been heated to a point sufficient to kill the pink bollworm in a machine which has been tested and approved by an inspector of the Federal Horticultural Board: *Provided*, That cotton seed from an infested or regulated area in one State may move interstate, without such heating under permit, for crushing at a mill in a contiguous infested or regulated area, if in such movement the seed does not pass through any cotton-growing territory which is not under regulation.

3. No particular make of machinery for the disinfection of seed is prescribed. Any machine which does the work to the satisfaction of the inspector of the Federal Horticultural Board will be approved.

4. All of the seed must go through the heating chamber, in which such a temperature must be maintained continuously as will give the seed discharged a temperature of at least 145° F.

5. Permits will be issued only for shipments to mills which have agreed to the following requirements:

(*a*) Seed must be unloaded directly into the hopper or into a conveyor leading directly to the hopper for immediate crushing.

(*b*) All seed scattered in the process of handling must be immediately collected and crushed along with the other seed or burned.

(*c*) The process of hulling must be accomplished by running the seed first through either a bar huller or a disk huller; immediately thereafter, without storage but as a continuous process, through a disk huller. This disk huller is to be kept in fine adjustment at all times, so that there is no possibility of any uncrushed seed making their way through it.

(*d*) Such construction, installation, or repair of chutes and conveyors must be made as, in the opinion of an inspector of the Federal Horticultural Board, will prevent the possibility of contamination of the hulls with the seed.

(*e*) Cars must be thoroughly cleaned of all seed immediately after unloading.

(*f*) All seed received in a condition unfit for crushing must be immediately burned.

(*g*) Mills shall make such reports from time to time as are required by the Federal Horticultural Board or its accredited representatives and shall allow inspectors of the board free access to all parts of mills at all times.

(*h*) Mills must execute a bond with approved sureties in the amount of $5,000 guaranteeing compliance with the foregoing regulations.

Regulation 7.—Inspection and certification.

Cotton and other articles the interstate movement of which is permitted under regulation 6 shall not be moved or allowed to be moved interstate until such products have been inspected and certified by the United States Department of Agriculture.

Regulation 8.—Marking and certification.

Cotton and other articles the interstate movement of which is permitted under regulation 6 shall be subject to such marking and labeling as may be required by the inspector of the United States Department of Agriculture. Copies of the permit required by regulation 6 must be attached to the waybills, conductor's manifests, memoranda, or bills of lading covering such shipments. In the case of lint, linters, and bagging or other containers, the bales or other parcels of such materials shall be plainly marked with the name and address of the shipper and the name and address of the consignee. Containers of cottonseed hulls, cake, and meal will not be required to be marked, but copies of the permit must be attached to the waybills, conductor's manifests, memoranda, or bills of lading covering such shipments.

Regulation 9.—Conditions under which cotton and other articles originating outside of the infested and regulated areas may be shipped from points within infested and regulated areas.

Cotton and other articles of which the interstate movement is restricted by these regulations and which originate outside of the infested and regulated areas quarantined on account of the pink bollworm of cotton may be shipped interstate from points within the infested and regulated areas to points outside of such areas under permit from the Secretary of Agriculture. Transportation companies shall not accept or move interstate from within the infested and regulated areas such articles originating outside of the infested and regulated areas unless each shipment is accompanied by a permit issued by the United States Department of Agriculture.

Regulation 10.—Conditions governing inspection and issuance of certificates and permits.

Persons intending to move or allow to be moved cotton or other articles for which certificates of inspection or permits are required by these regulations will make application therefor as far as possible in advance of the probable date of shipment. Applications should show the nature and quantity of the articles which it is proposed to move, together with their exact location, and, if practicable, the contemplated date of shipment. All charges for storage, cartage, and labor incident to inspection, other than the services of inspectors, shall be paid by the shipper. Applications for inspection and issuance of certificates and permits must contain the names and addresses of the consignors and consignees and should be made to the office of the Federal Horticultural Board, Carter Building, Houston, Tex., or to such other offices as may be later established, and of which due notice shall have been given.

Regulation 11.—Cleaning of railway cars, boats, and other vehicles and materials required before moving interstate.

Railway cars, boats, and other vehicles, hay and other farm products, farm household goods, and farm equipment, covered by these regulations, or any other articles which may hereafter be made subject thereto, and originating within the quarantined and regulated areas, shall not be moved or allowed to move interstate unless the same shall have been thoroughly cleaned or disinfected at the point of origin or shipment to the satisfaction of an inspector of the United States Department of Agriculture.

Regulation 12.—Shipment by the United States Department of Agriculture.

This quarantine shall not apply to the movement by the United States Department of Agriculture of cotton and other articles specified therein when intended for experimental or scientific purposes.

The above rules and regulations are hereby adopted and shall be effective on and after May 1, 1922, and shall supersede on and after said date the rules and regulations issued under notice of Quarantine No. 52, August 19, 1921, effective on and after September 10, 1921.

Done at the City of Washington this 31st day of March, 1922.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.]

HENRY C. WALLACE,
Secretary of Agriculture.

APPENDIX.

State Control of Cotton and Other Articles in Cooperation With Federal Authorities.

Internal control by the State, in cooperation with Federal authorities, of cotton and other articles set forth in the following paragraphs will be required under the proviso to Quarantine No. 52 as a condition of limiting, by the Secretary of Agriculture, the restrictions of the rules and regulations under that quarantine to the areas designated as infested or regulated. These conditions are subject to such modification by the Secretary of Agriculture from time to time as may be determined to be necessary.

The growing crop.—The growing crop shall be under the full control of State authorities in cooperation with the Federal authorities, such control to include authority to inspect the fields as often as may be deemed necessary and to require the prompt destruction of any cotton in fields which shall be determined as infested with the pink bollworm.

Cotton seed.—All cotton seed grown in the regulated areas shall be under the full control of the State authorities in cooperation with the Federal authorities. This control shall provide for its prompt milling or its disinfection under supervision at gins by a process approved by the Federal Horticultural Board, in which case the use of the seed for planting or for feeding will be allowed.

Cottonseed hulls.—All cottonseed hulls shall be cut to such degree of fineness as to destroy all infestation by the pink bollworm at the mills, as a continuing part of the process of hulling and milling of the seed, in such manner and by such means as shall be required by the proper officials of the State concerned in cooperation with the Federal authorities.

Cotton lint, linters, gin waste, and all other forms of cotton lint.—All lint, linters, gin waste, and all other forms of cotton lint produced in regulated areas shall be under the full control of the State authorities in cooperation with the Federal authorities. The interstate movement of these products will be allowed only under permit issued by the Secretary of Agriculture and upon compliance with the conditions to be prescribed in such permit.

Conveyors, household goods, farm products, etc.—Railway cars, boats, and other vehicles which have been used in conveying cotton and cotton products grown in the infested districts or which are fouled with such products, hay and other farm products, farm household goods and farm equipment, shall, as a condition of intrastate movement, be subject to such inspection, cleaning, and disinfection as shall be deemed necessary to prevent the spread by such means and agencies of the pink bollworm.

Cotton in noncotton zones.—All volunteer or other cotton growing in a noncotton zone shall be promptly destroyed.

BOLLWORM REGULATIONS REVISED.

(Press notice.)

April 12, 1922.

Secretary of Agriculture Wallace has approved a revision of the rules and regulations governing the Federal pink bollworm quarantine effective May 1. The quarantine affects Texas, Louisiana, and New Mexico, and in itself remains unchanged. With one exception, the changes in the regulations are merely those necessitated by the revision of the quarantined districts made by the State authorities. These revisions were approved by the department, it is pointed out, and it is necessary, therefore, to make the designations in the regulations of these districts correspond with the designations in the State quarantine orders.

In item 6 of the Federal regulations a minor change is made to permit the movement of seed prior to disinfection from one regulated area to another. This, it is said, will save the cost of disinfection prior to such a movement where the seed is intended to be moved from one infested area directly to another for crushing, provided no risk of spreading the pest is involved. Copies of the new regulations may be had upon application to the United States Department of Agriculture, Washington, D. C.

REGULATIONS PROMULGATED BY THE COMMISSIONER OF AGRICULTURE GOVERNING THE PLANTING, GROWING, AND MARKETING OF COTTON PRODUCED IN REGULATED ZONES AND PRESCRIBING MEANS OF DISINFECTING THE SEED.

Whereas His Excellency the Governor of Texas, acting in his official capacity, has by proclamation declared certain areas within the State of Texas regulated zones in which it shall be lawful to plant, cultivate, and market cotton under such rules and regulations as shall be promulgated therefor by the commissioner of agriculture, which may include the planting of seed from noninfested territory, ginning at designated gins, milling or disinfecting of all seed produced in such zones, marketing of the cotton, and cleaning of fields, and such other rules as may be found necessary; and

Whereas section 8, chapter 41, general laws of the first called session of the thirty-seventh legislature, makes the following provision:

Provided, That no ginner shall be authorized to gin cotton from regulated zones unless he shall disinfect all seed under such rules as the commissioner of agriculture shall prescribe.

Now, therefore, I, Geo. B. Terrell, commissioner of agriculture of the State of Texas, by virtue of authority vested in me by the laws of Texas, do hereby promulgate the following rules and regulations for producing and marketing of cotton from regulated zones and prescribing the method of disinfection by ginners of cotton seed produced within such zones:

1. Except as hereinafter provided no seed cotton, cotton seed, lint, linters, gin or mill waste or motes produced within or carried into a regulated zone shall be moved outside of such zone without specific authority from the commissioner of agriculture of Texas.

2. Common carriers are hereby authorized to accept for shipment without specific authority of this department cotton lint and cotton linters which are forwarded on a through export bill of lading. The common carriers are also hereby authorized to accept for shipment cotton lint and cotton linters which are covered by local bills of lading, the destination in which is shown to be a port, provided such cotton lint and cotton linters remain in possession of such carriers for movement to points outside of Texas. All cotton lint and cotton linters as herein described may be stopped in transit within any regulated zone or at ports for compressing.

(The Federal quarantine order prohibits the movement of any cotton originating in regulated zones to any point outside of Texas and within the United States, unless such cotton shall go by ocean route to eastern mills and be subjected to vacuum fumigation at certain eastern ports.)

3. Cotton or cotton linters originating at points within a regulated zone may be shipped for concentration and warehousing at any point within any regulated zone and at Houston, Galveston, and Texas City and at such other ports as may be hereafter designated by the commissioner of agriculture. But before shipments of such cotton for concentration or warehousing are made or accepted by a common carrier the owner or consignor shall make a list in triplicate containing a statement of each and all bales embraced in the shipment, including definite identification marks appearing upon each bale so listed. This list shall be made on forms which will be furnished by the State department of agriculture. This list must be presented to an inspector of the State department of agriculture for approval; and if such inspector approves of the movement of the cotton, he shall sign the statement in triplicate, one copy of which shall be retained by the inspector, one copy to the consignee, and one copy delivered to the common carrier with the bill of lading when the

same is presented for signature. Such concentrated and warehouse cotton shall be kept separate and apart from all other baled cotton and shall be shipped only to warehouses designated by the commissioner of agriculture, and all owners, carriers, warehousemen, compressmen, and other handlers are hereby required to keep such cotton segregated. All consignors of such quarantined cotton shall give notice to the consignees thereof that it is quarantined cotton and must be segregated and finally shipped out of this State for export.

4. All ginners operating within regulated zones shall print upon each end of each and every bale of cotton the letter "Q," using therefor a stencil in red paint, to be furnished by the State department of agriculture, and all parties handling such cotton shall take notice that the aforementioned sign indicates that such cotton has originated within regulated zones and must be exported.

5. Whenever the destination of a shipment is changed these rules must be applied as to the changed destination.

6. All ginners operating within regulated zones, as provided for in section 8 of the above-mentioned act, shall, as a continuous process of ginning, disinfect by means of heat all cotton seed passing through their plants, using machines therefor approved by the commissioner of agriculture, and such machines shall be operated in conformity to special rules promulgated by the commissioner of agriculture governing the particular type of machine installed.

7. All growers of cotton within regulated zones shall plant seed originating without a regulated zone or seed disinfected under the supervision of this department. They shall not keep cotton seed or seed cotton grown within a regulated zone upon their premises during a growing season unless they are properly disinfected.

8. Since the pink bollworm is known to be present in the cotton fields of western Texas and New Mexico and regulations are in effect there as a means of control and not as a means of eradication, no cotton seed shall be moved into Texas from the State of New Mexico except into Ward County or areas west of the Pecos River, and no cotton seed west of the Pecos River and from Ward County shall be shipped eastward thereof to any other part of Texas.

Since the pink bollworm of cotton is a dangerous insect pest and is so recognized by law, which declares it a public menace and its eradication a public necessity, I have promulgated the above rules and regulations as a means of control and eradication. I therefore call upon the people of Texas to faithfully abide by these rules and regulations to the end that a State and national calamity may be avoided. I respectfully call attention to section 15 of the above-mentioned act which provides penalties for the violation of such rules and regulations, and which reads as follows:

SECTION 15. Any person or persons who may transport any cotton or cotton products by any means from any territory in this State which has been quarantined and placed under restrictions by proclamation of the governor of the State, in accordance with the authority conferred by the terms of this act, or any person or persons who shall violate any proclamation or any rule, regulation, or other restriction authorized by this act, or bring into the State any contaminated material, or any person or persons who shall plant, cultivate, grow, allow to grow, gather, transport, or market cotton in or from any territory in this State that has been quarantined and declared a noncotton zone and placed under restrictions by any of the proclamations authorized by this act, or any person or persons who shall fail to comply with any of the said rules and regulations so promulgated for the control and direction of cotton growing and marketing in any restricted or regulated zone, or who shall violate any proclamation, regulation, or restriction authorized by this act; or any ginner who shall fail or refuse to disinfect cotton seed as provided for in this act, or any person or persons who shall willfully refuse or knowingly

neglect to comply with any such proclamation, restriction, or regulation promulgated and maintained for the protection of the cotton industry, shall be deemed guilty of a misdemeanor and upon conviction shall be fined in any sum not less than fifty ($50.00) dollars and not more than five hundred ($500.00) dollars, and each transaction of each product so shipped or transported, and each act in violation of the restriction herein authorized governing the planting, growing, marketing, and cleaning the fields, shall constitute a separate offense. The district court of the county in which any criminal case is filed under the provisions of this section may, upon the application of either the State or of the defendant and a showing that the applicant can not obtain a fair trial in that county, order a change of venue to an adjoining county or district.

Given under my hand and seal of office in the city of Austin, State of Texas, this 17th day of May, A. D. 1922.

[SEAL.] GEO. B. TERRELL,
Commissioner of Agriculture.

Filed in the office of the secretary of state this 17th day of May, 1922.
S. L. STAPLES, *Secretary of State.*

SUPPLEMENTARY APPROPRIATION FOR PINK BOLLWORM ERADICATION.

[Public, No. 172—67th Congress—H. R. 10663.]

AN ACT Making appropriations to supply deficiencies in appropriations for the fiscal year ending June 30, 1922, and prior fiscal years, and for other purposes.

* * * * * * *

MISCELLANEOUS.

Eradication of pink bollworm: To enable the Secretary of Agriculture to meet the emergency caused by the existence of the pink bollworm of cotton in Mexico; to prevent the movement of cotton and cotton seed from Mexico into the United States, including the regulation of the entry into the United States of railway cars and other vehicles, and freight, express, baggage, or other materials from Mexico, and the inspection, cleaning, and disinfection thereof, $50,000, including the payment of rent outside of the District of Columbia and the employment of persons and means in the city of Washington and elsewhere; any moneys received in payment of charges fixed by the Secretary of Agriculture on account of such cleaning and disinfection at plants constructed therefor out of any appropriation made on account of the pink bollworm of cotton to be covered into the Treasury as miscellaneous receipts.

* * * * * * *

SEC. 4. This act hereafter may be referred to as the "second deficiency act, fiscal year, 1922."

Approved, March 20, 1922.

REPORT ON SCOUTING FOR THE PINK BOLLWORM, CROP OF 1921.

By K. H. TOWNSEND.

TERRITORY SCOUTED.

Scouting, or the inspection of cotton fields, to determine where pink bollworm infestations exist, is conducted each season throughout the Cotton Belt of the United States and along the Mexican frontier. The majority of the scouting is performed in Texas, while Louisiana ranks next. The areas where infestations have been discovered receive greater attention than all others. These are

the following districts: Texas: Hearne, Trinity Bay, Big Bend, Pecos Valley, El Paso Valley, Ennis, Marilee. Louisiana: Cameron, Shreveport. New Mexico: Mesilla Valley, Carlsbad.

From the time that the work began in 1917 to May 1, 1922, scouting has been performed in 694 different localities. These were selected for scouting because they were located either in or near infested or formerly infested areas; possibly infested material had been received; situated along the Mexican border; Mexican laborers were employed for cotton picking; outbreaks of the pink bollworm were reported, or they had become suspicious for some other reason. These localities are distributed as follows:

State.	Number of localities.	State.	Number of localities.
Alabama	11	North Carolina	15
Arizona	31	Oklahoma	3
Arkansas	11	South Carolina	17
California	11	Tennessee	1
Florida	6	Texas	372
Georgia	20	Mexico	33
Louisiana	130		
Mississippi	9	Total	694
New Mexico	24		

In Mississippi nine localities have been scouted by Federal inspectors, but every county in the State except one was scouted during the 1920 crop by State inspectors.

Each season certain localities are omitted from the scouting list because further scouting in such localities is considered unnecessary. Inspections will have been made in about 380 localities during the 1921 crop when the scouting is completed.

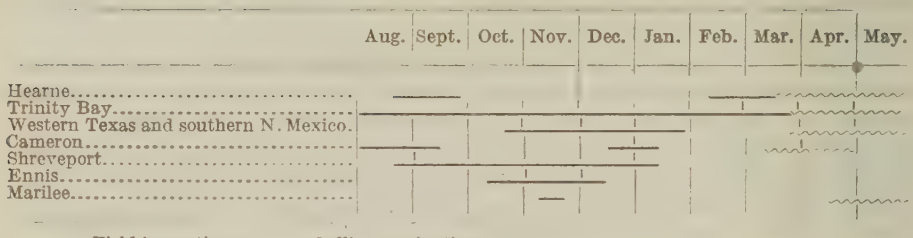
Scouting Results, 1921.

It had been planned at the opening of the season that scouting should commence in the various sections of the cotton belt about the time that cotton picking began. A number of crews of inspectors were distributed throughout the Lower Rio Grande Valley early in June, 1921, to commence the work, and later other crews were added. As the season progressed the crews were assigned to new localities, advancing each time in a northerly direction, until by the end of the season they had filtered into all parts of the cotton belt. During this time some localities had been scouted two or three times. The examination of cotton bollies completed the work of the season.

A number of temporary inspectors were employed during the summer months to assist the regular force with the scouting work. During the season an average of about 55 inspectors devoted their time to scouting.

The most alarming feature of the work during the past season was the widespread distribution of the Carlsbad infested seed. The pink bollworm was first discovered in the Carlsbad, N. Mex., irrigation project on January 6, 1921. Prior to that time large quantities of cotton seed had been shipped to many localities throughout Texas and to points in New Mexico, Oklahoma, and Arkansas. These localities were given special attention and every effort was made to give them a thorough inspection. The result was that only two light infestations were discovered. The outlook is therefore much more encouraging than it was early in the season.

INFESTED AREAS.



———=Field inspections; ~~~~=bollie examinations.

FIG. 1.—Periods of scouting in infested districts.

HEARNE DISTRICT.

Infestations were found in 1917 in five fields, which were located within one-fourth of a mile of the Planters' Cotton Oil Mill at Hearne. None have been discovered since then.

Scouting was begun in this district shortly after the middle of August, 1921, and continued throughout September. It was discontinued at that time with the intention of resuming work in November, but this was not possible, as it was imperative that inspections be finished in the Ennis and Marilee districts. Some further scouting was performed from early in February until the first part of March, when the examination of bollies was begun. This was completed late in May, 1922.

This was the first crop that was grown after the noncotton zone had been completely lifted. Material for inspection was plentiful. No trace of the pink bollworm was found.

TRINITY BAY DISTRICT.

Infestations have been found each season in this district since 1917, with the exception of 1918, when only a small amount of outlaw cotton was grown. It is remarkable, though, how it has steadily decreased.

Very little cotton was grown in this section in 1921 compared with other years. Scouting began the 1st of August and continued until late in March. The examination of bollies, which is now in progress, will complete the work.

One specimen of the pink bollworm was discovered in a field near Moss Bluff on September 23, 1921. This was not far from the noncotton zone, and it was the only infestation found in the district.

WESTERN TEXAS AND NEW MEXICO.

This area includes five separate districts: The Big Bend, El Paso Valley, Mesilla Valley, Pecos Valley, and Carlsbad.

Infestations were first discovered in the Big Bend district in 1918. Cotton is grown on the small cultivated areas located along the Rio Grande where water is obtained for irrigation. One infestation was found in 1919 in some outlaw cotton grown at Pilares; no cotton was grown in 1920; and a general infestation was again found in 1921.

The next district that was found to be infested was the Pecos Valley. This was during the crop of 1918. Only one infestation was found in 1919 after a great amount of scouting. In 1920 and 1921 the infestations have steadily increased.

The infestation then appeared in the Mesilla Valley near Anthony, N. Mex., in the fall of 1920. It was found again in 1921.

Shortly after the discovery of the pink bollworm in the Mesilla Valley it appeared in the El Paso Valley. Infestations have been found in this valley both in 1920 and 1921.

On January 6, 1921, it was discovered in the Carlsbad, N. Mex., irrigation project and again in 1921.

During the past season only enough scouting was done in these districts to establish the existence of the infestations in each. But some special inspections were made in the El Paso Valley to determine the increase of the infestation over that of the 1920 crop. An average of 0.09 pink bollworm specimens were found per man-day in 1920 on the Ivey-Dale Ranch, while 2.94 specimens were found per man-day in 1921 on the same farm.

THE BIG BEND INFESTATION.

A study was made of the present infestation in the Big Bend to determine its origin, but no definite conclusion was reached. It is planned that further investigations shall be made.

The first infestations were discovered in the Big Bend in 1918. They were distributed all along the Rio Grande from Candelaria to Boquillas. An infestation was found in some outlaw cotton at Pilares in 1919. Cotton was not grown in this district in 1920. In 1921 infestations were discovered wherever cotton was grown along the river, but none occurred in the small plantings which were situated some distances away.

Field inspections showed that the infestation was heaviest in the fields which were located farthest down the Rio Grande. The individual fields appeared to be most heavily infested on the side nearest the hills or brush, rather than on the river side. The top crop of bolls showed a heavier infestation than the middle or lower bolls.

Various hypotheses have been advanced to explain the cause of the occurrence of the infestation in 1921. It is thought that the infestation was either introduced in infested seed that was brought to the district through ignorance or maliciousness, that seed or seed cotton was held over from the 1918 crop, that larvæ might have survived in the soil since 1918, that it was carried over on an alternate food plant, that it was carried by rivers or irrigation water, or it was spread by flight.

We know that Mexican laborers habitually carry small quantities of cotton seed when moving from place to place, that small amounts of cotton seed were held over several years in the Big Bend, that seed cotton of the 1918 crop was used in mattresses, that all volunteer cotton was destroyed and the insect was never found on an alternate food plant in this district and that if the infestation had been spread by the rivers it would probably be heaviest at the points located farthest up the river than down. A few soil examinations which were made indicate that the insect probably did not hibernate in the soil from the 1918 to the 1921 crop. No definite conclusion has been reached about flight.

The explanation of the occurrence of a phenomenon is usually a simple one. If it can be proved, it will probably be found that the 1921 infestation was caused by infested seed or seed cotton that was held over or brought to the district.

CAMERON PARISH DISTRICT.

Infestations were found in this district only during the 1919 crop. The parishes of Calcasieu, Cameron, and Jefferson Davis were a noncotton zone in 1920. It was the same in 1921, except that cotton was grown in a regulated zone which extended from near Lake Charles east into Jefferson Davis Parish. This

cotton was scouted during the past season from August 1 to September 16 and from December 19 to January 9. Bolls were then examined from March 9 to April 28. No trace of an infestation was discovered.

SHREVEPORT DISTRICT.

Infestations were discovered in this district only in 1920. The cotton fields which were located within the regulated zone, and also many outside it, were scouted this season. Inspections began shortly after the middle of August and continued until January. No trace of an infestation was discovered.

ENNIS DISTRICT.

The Ennis Cotton Oil & Manufacturing Co. of Ennis received some "Durango" cotton seed which was shipped from the Carlsbad district of New Mexico prior to the discovery of the infestation there. Fourteen carloads of the 1919 crop seed were received from Otis and Loving. This was crushed. Thirteen carloads of the 1920 crop were received from Otis, Malaga, and Loving. Three carloads of the 1920 crop seed were crushed, five were sold locally for planting, three were shipped to other points within the State for planting, and two were stored at the mill during the growing season of 1921. The seed of the 1920 crop which came from Otis, N. Mex., was considered the most dangerous as the only infestations found in that district were near Otis.

About 118 local farmers purchased seed directly from the oil mill for planting. A number of these farmers resold quantities of the seed to their neighbors. So the local sales were distributed to various parts of Ellis County, as far east as Kaufman in Kaufman County, and as far south as Rice in Navarro County. But a majority of the sales were confined to the southeastern portion of Ellis County.

Scouting began in the vicinity of Ennis on October 6 and continued until the last of November. All cotton fields situated near town were scouted thoroughly and also all in the district where "Durango" cotton seed had been planted.

The first infestation was found 3 miles south of Ennis on October 12. Four other fields were found to be infested, all located south and east of town, within three-fourths of a mile from the oil mill. The infestations were undoubtedly caused by moths flying to the fields after emergence from the "Durango" cotton seed stored at the oil mill.

An average of 0.03 pink bollworm specimens were found per man-day scouting performed in this district. In other words, the infestation is extremely light.

MARILEE DISTRICT.

One carload (40,000 pounds) of "Durango" cotton seed, grown in 1920 in the Carlsbad district of New Mexico, was shipped early in May, 1921, by the Ennis Cotton Oil & Manufacturing Co., of Ennis, to Marilee, where it was stored in the gin seed house during the remainder of the year. After the discovery of the Ennis infestation the cotton fields surrounding the seed house at Marilee were thoroughly inspected. This was during November. Only two fields were found to be infested, one located just east of the gin and the other one-half of a mile south. Cotton seed obtained from Waxahachie was planted in the first field, while "Durango" seed was planted in the other. Only 5 acres in two fields were found to have been planted with the "Durango" cotton seed in this district. Bollies were collected and examined late in the season, but no further infestation was found. The infestations which were discovered were undoubtedly caused by moths flying to the fields from the stored seed after emergence.

RÉSUMÉ.

Pink bollworm infestations were discovered in 67 cotton fields during the season, 52 being in Texas, 7 in New Mexico, and 8 in Mexico. One of the Mexican fields was located on the Rio Grande in Chihuahua, at Vada de Piedra, just across the border from San Jose, Presidio County, Tex. The other seven were at Monclova, Coahuila, which is about 140 miles west-southwest of Laredo, Tex., the nearest point on the border. Those found in Texas were located in six different areas. Hearne being the only one of the previously infested districts where an infestation was not discovered. The New Mexico infestations occurred in two separate areas. No other infestations were found in the United States or along the Mexican frontier.

The heaviest infestations exist in western Texas, while they are extremely light in the eastern part of the State. It is quite probable that a larger number of infested fields could have been found in western Texas and southern New Mexico had more time been spent there in scouting, but there was no object in doing this, as it was only desirable to know that the infestation existed there in each area.

The scouting which was performed in each of the infested districts has already been discussed on previous pages. A tabulated summary of this work will be found in Table 1.

TABLE 1.—*Summary of scouting in infested districts.*

District.	Localities—		Inspections.	Fields.					Man-days scouting.			P.B.W. specimens found per man-day.
				Number.		Acreage.						
	Inspected.	Infested.		Inspected	Infested.	Total.	Inspected.	Infested.	Total.	Per acre.	Per P. B. W. specimen.	
Hearne	1	0	101	17	0	554		0	207			
Trinity Bay	45	1	671	329	1	6,632		12	1,072		1,072.00	0.00
Big Bend	9	8	51	36	11	356		154	22		.19	5.32
Pecos Valley	7	5	136	76	21	4,510		862	279		2.63	.38
Cameron	18	0	179	140	0	1,519		0	309			
Shreveport	2	0	130	111	0	4,193		0	319			
Mesilla Valley	6	4	18	15	6	233		50	26		.53	1.88
El Paso Valley	7	5	29	11	9	3,998		3,742	73		.34	2.93
Carlsbad	4	3	21	20	4	610		120	38		1.90	.53
Ennis	15	1	261	163	5	5,145	3,356	261	798	0.24	38.00	.03
Marilee	3	1	35	10	2	321		23	104		17.33	.06
Total	117	28	1,632	928	59	28,071		5,224	3,247		4.52	.22

OTHER LOCALITIES.

In addition to the foregoing districts, many localities were scouted during the season throughout the Cotton Belt, extending from coast to coast and as far north as Oklahoma and North Carolina. About 380 localities in all were scouted. These localities were scouted for the reasons given on a previous page. Most were included on the list of scoutings at the opening of the season, while others were added after tracings of shipments from the Carlsbad district had been completed, etc.

While scouting early in the season at Corpus Christi one of our inspectors was informed that a planter in the Laguna region of Mexico had received some cotton seed from Lockhart, Tex., which was infested with the pink bollworm. This was investigated, and it was found that the scavenger worm, *Pyroderces rileyi* Wals., had been mistaken for the pink bollworm.

Early in January, 1922, it was learned that an elderly lady living in Nashville, Tenn., grew a small amount of cotton in a garden each year since about 1908. The seed was obtained from Alexandria and Cairo, Egypt, and China. The lint was separated from the seed by hand, carded, and spun on an old-fashioned spinning wheel and knitted into men's wristlets. No seed had ever been given away or sold. An examination of the seed on hand did not show any trace of the pink bollworm.

A small sample of cotton seed was sent from Santo Domingo to Commerce, Tex., which was to be grown as an ornament. It was examined and found to be free from the pink bollworm but was destroyed.

On several occasions during the season it was reported from different localities that the pink bollworm had been discovered by farmers. But when these were investigated the insects proved to be the boll weevil, ordinary bollworm, or scavenger worm.

A summary of the scouting performed during the season will be found in Table 2. It shows for each State the number of localities where scouting was conducted, the number of inspections made, the number of cotton fields which were inspected and the number found to be infested with the pink bollworm, the total acreage of the fields inspected, the acreage of the infested fields, and the number of man-days scouting. This data is complete to April 30, 1922.

TABLE 2.—*Scouting summary.*

State.	Localities.	Inspections.	Fields.				Scouting, man-days.
			Number.		Acreage.		
			Inspected.	Infested.	Total.	Infested.	
Central:							
Arkansas	2	17	6	.....	44	.....	37
Louisiana	39	646	468	.....	8,517	.....	1,300
New Mexico	18	56	50	7	1,296	161	84
Oklahoma	3	47	24	.....	476	.....	99
Texas	212	2,557	1,362	52	55,084	5,069	5,044
Mexico	21	.....	.....	8	.....	.....	208
Western:							
Arizona	6	104	72	.....	2,041	.....	265
California	11	98	68	.....	4,693	.....	153
Eastern:							
Alabama	9	18	18	.....	129	.....	16
Florida	6	21	21	.....	464	.....	10
Georgia	18	49	46	.....	362	.....	33
Mississippi	.....	.....	.....	.....	.....	.....	.....
North Carolina	11	81	81	.....	629	.....	56
South Carolina	17	91	68	.....	792	.....	60
Tennessee	1	1	1	.....	T.	.....	T.
Total	374	3,786	2,285	67	74,527	5,230	7,365

In addition to the data given in Table 2, the State inspectors of Arkansas performed 6 man-days scouting, and Louisiana 15. A South Carolina inspector performed 19 man-days scouting, but this is included in the table. The Texas inspectors did a large amount of scouting also, which is included in the table. Mississippi has done a large amount of scouting, but it has not yet been possible to obtain the data.

Late in the season bollies were collected at 4 localities in Arizona, 7 in Louisiana, 3 in New Mexico, and 39 in Texas. Approximately 4,400 bushels were gathered, and about 2,000 bushels were inspected by June 1, 1922. The localities where the bollies were collected were selected because it was believed that insufficient inspection had been made in them and more was desirable.

HOUSTON, TEX., *June 5, 1922.*

COMPENSATION ON ACCOUNT OF NONCOTTON ZONES—JOINT RESOLUTION OF CONGRESS AND REGULATIONS.

(Effective on and after April 1, 1922.)

[Public resolution No. 12—Sixty-seventh Congress—S. J. Res. 72.]

JOINT RESOLUTION For the relief of States in the Cotton Belt that have given aid to cotton farmers forced from the fields in established nonproduction zones through efforts to eradicate the pink bollworm.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That when any State shall have enacted legislation and taken measures, including the establishment and enforcement of noncotton zones, adequate, in the opinion of the Secretary of Agriculture, to eradicate the pink bollworm in any area thereof actually infested or threatened by such pest, the said Secretary, under regulations to be prescribed by him, is authorized, out of the appropriation of $554,840 for "eradication of pink bollworm" made by the agricultural appropriation act of March 3, 1921, to utilize not to exceed $200,000 in reimbursing such States for expenses incurred by them in compensating any farmer for his loss due to the enforced nonproduction of cotton within said zones: *Provided,* That such reimbursement of any State shall be based upon the actual and necessary loss suffered by the owner of said land; that such reimbursement shall not exceed one-third the amount actually paid by the State to any farmer, and in no event shall exceed $5 per acre; and that no reimbursement shall be made in respect of any farmer who has not complied in good faith with all quarantine and control regulations prescribed by said Secretary of Agriculture and such State relative to the pink bollworm.

Approved August 9, 1921.

REGULATIONS PURSUANT TO JOINT RESOLUTIONS OF HOUSE OF REPRESENTATIVES AND SENATE ENTITLED "FOR THE RELIEF OF STATES IN THE COTTON BELT THAT HAVE GIVEN AID TO COTTON FARMERS," APPROVED AUGUST 9, 1921.

Regulation 1.

Only such applications by any State for reimbursement will be considered as involve losses of farmers originating during the growing season of 1921 or later, for which compensation has been made by the State subsequent to August 9, 1921.

Regulation 2.

Any State applying for reimbursement hereunder shall furnish to the Department of Agriculture a full and complete record of all proceedings relating to the establishment and maintenance of such noncotton zones by said State; the names and addresses of all claimants within said zones; the location and actual acreage of the premises of all claimants in connection with which payment was made; the amount allowed and paid to each claimant; and such other information as may be necessary fully to establish all the facts in connection with such noncotton zones and payments to claimants therein for which application for reimbursement is made. Such State shall also establish by the certificate of a properly authorized official that the amounts allowed and paid were the actual and necessary losses sustained by the respective claimants and that each claimant complied with all provisions of Federal and State laws and regulations relating to noncotton zones.

Regulation 3.

All statements included within the record provided for in regulation 2 hereof shall be duly certified by the proper officers of the State making application for reimbursement, which certification shall show the authority of such officers to make the same.

Done at the city of Washington this twenty-second day of March, 1922.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.] HENRY C. WALLACE,
Secretary of Agriculture.

REGULATIONS ANNOUNCED FOR REIMBURSING STATES FOR NONCOTTON-ZONE EXPENSES.

(Press notice.)

MARCH 27, 1922.

Secretary of Agriculture Wallace has announced regulations to govern Federal aid to States in the Cotton Belt that compensated cotton farmers forced from the fields through the establishment of nonproduction zones as a means of eradicating the pink bollworm. The regulations become effective April 1.

The sum of $200,000 was authorized by Congress to be used for the relief of the States. Under the Secretary's regulations applications for reimbursement will be considered only when they involve losses of farmers originating during the growing season of 1921 or later, for which compensation has been made by the State subsequent to August 9, 1921. The State applying for reimbursement must furnish the United States Department of Agriculture with a full and complete record of all proceedings relating to the establishment and maintenance of its noncotton zones; the names and addresses of all claimants within the zones; and location and actual acreage of the premises of all claimants in connection with which payment was made; the amount allowed and paid to each claimant; and such other information as may be necessary fully to establish all the facts in connection with the zones and payments to claimants for which reimbursement is asked.

The State must furnish a certificate of a properly authorized official showing that the amounts allowed and paid were the actual and necessary losses sustained by the respective claimants, and that each claimant complied with all the provisions of Federal and State laws and regulations relating to noncotton zones.

Under the terms of the resolution authorizing the use of Federal money for this purpose, Congress stipulates that the reimbursement of any State shall be based upon the actual and necessary loss suffered by the farmer; that the reimbursement shall not exceed one-third the amount actually paid by the State to the farmer, and in no event more than $5 an acre; and that no reimbursement shall be made in respect to any farmer who has not complied in good faith with all quarantine and control regulations prescribed by the Secretary of Agriculture and the State.

REPORT OF THE CLEANING OF COTTON FIELDS IN THE ERADICATION OF THE PINK BOLLWORM, 1917–1921, INCLUSIVE.

By F. S. PUCKETT, *Plant Quarantine Inspector.*

An important part of the work against the pink bollworm in the United States has been what is called the cleaning of the fields. This consists of collecting and destroying all of the parts of the cotton plant which might carry infestation through from one season to another.

As indicated below, the methods followed have been about 99 per cent efficient in removing all parts of the cotton plant which could carry infestation. It should be noted, however, that in any cotton field there may be a certain number of insects in the ground which would not be reached by any process of cleaning the field. For various reasons it appears that any of the pink bollworms which may be in the soil are of very little practical importance in the United States. Experiments which have been performed in Mexico and elsewhere show that the mortality of the pink bollworm in the soil increases as the moisture increases. Where experimental plots in Mexico were kept moistened throughout the winter, none of the insects succeeded in surviving. In the United States the fall and winter months ordinarily show the greatest precipitation. This is especially true in the Trinity Bay area in Texas, where

a great deal of the clean-up work has been done. In other words, we have in this country soil conditions which are least favorable for the survival of the pest. In fact, it is not at all likely that any of the insects in the ground are able to survive the winter. We therefore have an advantage in this country which does not exist in drier countries, where the soil conditions are such that survival in the ground could take place regularly.

There are many variations due to the local conditions, but in general the method of cleaning the fields consists of either pulling out the plants by the roots, chopping them down with hoes, or cutting them with mowing machines, bringing them together in large heaps, picking up by hand all parts of the cotton plant which are found on the ground, placing this débris on the piles of stalks, and burning the stalks and collected débris by the use of oil when necessary.

To determine the efficiency of such clean-up operations, some experiments were conducted in Jefferson County, Tex., in the fall of 1919. Six plots, 10 feet square, were selected at random in different fields. The amount of material was determined after the stalks had been cut and piled and before the field had been hand picked. These plots were gone over again and the amount of material capable of carrying pink bollworm infestation was determined after the fields had been hand picked by the laborers. In this work all material was collected from the surface of the ground and from the first inch of soil. The results of these tests proved the work to be between 98 per cent and 99 per cent efficient.

During the period September, 1917, to January, 1922, the department has cleaned 39,637 acres of cotton fields in the eradication of the pink bollworm in 10 districts in 3 States. In this work there has been made an expenditure of $369,831.91, which is an average cost per acre of $9.33.

In addition to the various methods used in cleaning cotton fields in the eradication of the pink bollworm mentioned above, experiments have been conducted with burning machines. During the spring of 1920 a machine was constructed for this purpose. The machine was successful as to the burning of the stalks and fallen particles, but it was not economical. The cost for cleaning cotton fields by this method averaged around $20 per acre.

In addition to the cleaning of cotton fields in the various districts the gins and oil mills in these districts have also been cleaned. In cleaning either a gin or an oil mill all seed, motes, etc., are removed, the machinery cleaned, and in many instances it is necessary to take up floors to remove seed that had fallen through cracks. This work is done as soon after the ginning season as possible.

In the maintenance of a noncotton zone it is necessary to keep it free of volunteer cotton plants. Owing to the mild climate in the coastal country, a large amount of the volunteer cotton sprouts from the stalks of the crop of the previous year. This cotton has been pulled out of the noncotton zones in the Trinity Bay, Hearne, Shreveport, and Cameron districts. A record was kept of the work done in the Trinity Bay district in 1918. In all, 3,284,966 plants were removed from 3,128 farms, comprising 50,683 acres. The amount expended in removing volunteer cotton plants was $24,397.15.

The various methods followed in the cleaning of cotton fields in the various districts have been governed by local conditions. In one district it was found that mowing machines and rakes were the most economical method, while in another grub hoes and hand rakes proved more practical, depending on the size of the cotton plants, methods of cotton culture, and the time the work is done.

Attached hereto is a summary of the fields cleaned by districts, giving the acreage, cost per acre, and total cost.

Summary of the cleaning of cotton fields in various districts, 1917–1921.

District.	1917			1918			1919		
	Acres.	Cost per acre.	Total cost.	Acres.	Cost per acre.	Total cost.	Acres.	Cost per acre.	Total cost.
Trinity Bay	7,171	$9.96–	$71,407.32				16,463	$7.36+	$121,200.91
Hearne	1,624	9.87+	16,032.56						
Big Bend				637.5	$0.90–	$569.66			
Pecos				1,850	17.08+	31,599.58	737	10.00+	7,370.42
El Paso									
Ennis									
Marilee									
Shreveport									
Cameron							160	4.86+	778.00
Total	8,795	9.94+	87,439.88	2,487.5	12.93+	32,169.24	17,360	7.45+	129,349.33

District.	1920			1921			Total crop.		
	Acres.	Cost per acre.	Total cost.	Acres.	Cost per acre.	Total cost.	Acres.	Cost per acre.	Total cost.
Trinity Bay	1,279	$10.65+	$13,633.61	2,736	$4.63+	$12,694.84	27,649	$7.92–	$218,936.68
Hearne							1,624	9.87+	16,032.56
Big Bend							637.5	.90–	569.66
Pecos	1,100	15.27+	16,802.20				3,687	15.12+	55,772.20
El Paso	1,123	15.33+	17,224.25				1,123	15.33+	17,224.25
Ennis				802	4.97+	3,992.56	802	4.97+	3,992.56
Marilee				721	4.75+	3,428.38	721	4.75+	3,428.38
Shreveport	3,233.5	16.42+	53,097.61				3,233.5	16.42+	53,097.61
Cameron							160	4.86+	778.00
Total	6,735.5	14.95+	100,757.67	4,259	4.72+	20,115.78	39,637	9.33+	369,831.90

SCOUTING PROGRAM FOR 1922 CROP.

The general plan of scouting which was carried out during the past season will be followed in 1922, with certain modifications. One new feature will be the examination of cotton blossoms at the opening of the season in selected localities. The regular field inspections will then follow, and the examination of bollies will complete the work of the season.

Blossom Inspection.

Injured cotton blossoms as well as cotton bolls and seed are examined for pink bollworm infestations wherever scouting is conducted. Blossoms which are attacked by the insect have a characteristic rosette shape and are easily distinguishable in the field where a heavy infestation occurs. If infestations are discovered at this stage of the growth of the cotton plant, much more work can be accomplished during the season. Many man-days' scouting can probably be saved, thereby making this time available for scouting at other places, and it will be possible to control the disposition of the crop.

Heretofore the average date on which the first infestations have been discovered in each district is November 12. The important work of the season centers around this date. Probably the scouting which has been performed after this date has been of greater importance than that done before it. Therefore, if this critical date of the season can be moved forward one or more months, scouting will become more effective—that is, there will be a longer period during which more effective scouting will be performed.

It is necessary to know where the pink bollworm exists each season. This is the reason why the infested areas receive so much attention. If the time spent in these areas can be reduced or the necessary scouting in them can be completed early in the season, extra man-days will be made available for scouting during the period when it is most effective. It is quite probable that the greatest benefit that will be derived from this method of scouting will be that done in the western areas of infestation.

Ten of the areas where infestations have been discovered and thirteen localities have been selected as the places where cotton blossoms are to be examined. The infested areas are the Trinity Bay, Cameron Parish, Ennis, Marilee, Shreveport, and the western areas of infestation. Las Rucias (near Matamoros), Mexico, and San Benito, Harlingen, and Mercedes, Tex., were selected because they are on the Mexican border and Mexican laborers are employed to pick the crop. And Carlsbad seed was either stored, planted, or crushed at the following: Agua Dulce, Georgetown, Nevada, Mesquite, Grapevine, Forney, Bowie, and Sweetwater, Tex., and Norman, Okla.

The examination of cotton blossoms will begin early in June in the lower Rio Grande Valley and progress northward until Norman, Okla., has been reached. It will begin in the various localities selected for the purpose when sufficient blossoms have appeared to justify inspections in the field. A few "flying squadrons," or quick moving crews, will be used to perform the work. Only about one week will be spent in the smaller localities, while possibly a month will be spent in the infested areas.

Field Inspection.

The regular field inspections will begin shortly after the middle of June in the lower Rio Grande Valley. A number of crews of inspectors will be assigned to various localities in the valley to start the work. Later, additional crews will be added and scouting will begin in other places at about the time that cotton picking begins until central Texas and southern Louisiana have been reached. After this time the remaining localities will be scouted as soon as the inspectors can reach them.

A definite date can be set on which scouting shall begin in each section of the cotton belt if a sufficiently large number of inspectors are provided to perform the work, but not when only a limited number are available. It is probably best to make the first regular field inspections in the various localities at about the time that cotton picking begins and a final inspection when cotton picking ends, or shortly thereafter. This will be followed as closely as the work will permit.

The areas where infestations have been discovered during past seasons, the localities where infested cotton seed was stored or planted, and the points along the Mexican border where cotton is grown are of greater importance from the standpoint of scouting than all others. For this reason it is planned that a first scouting will have been made in all localities, with certain exceptions, and completed in those of minor importance at about the time that cotton picking ends, so that the remainder of the time can be devoted to the more important areas.

Scouting will be conducted along the Mexican border periodically throughout the season. The Southeastern States should be scouted during November and December. Field inspections can be made in Arizona and California until a later date than other parts of the cotton belt. After a preliminary inspection, possibly in October, these States should be given a final inspection in January and February.

There are about 425 localities to be scouted during the crop of 1922. These are scattered throughout the cotton belt. Seventy-five inspectors will be needed to accomplish the work.

There are certain areas which should receive special attention. These are the Matamoros and lower Rio Grande Valleys, the districts from Laredo to Corpus Christi, Del Rio to San Antonio, Laredo to San Antonio, Big Spring to Abilene, the vicinity of San Antonio and the west coast of Mexico.

The chances of an infestation being carried from the Laguna to Matamoros are just as great as to El Paso. Mexican laborers are used for cotton picking in the districts between Laredo and Corpus Christi, Laredo and San Antonio, Del Rio and San Antonio, Big Spring and Abilene, and many Mexicans live around San Antonio. The States of Sonora, Sinaloa, and Lower California should be watched to learn when an infestation appears on the west coast of Mexico.

Bollie Examination.

It is not possible to say definitely how much scouting should be performed in any specific locality. The possibility exists that if more scouting were done in the more dangerous localities, an infestation might be discovered in them. It is for this reason that bollies are collected in the more important localities to be examined after it becomes impractical to make field inspections. This phase of the work is really a continuation of the field inspections.

It is best to select the localities where bollies are to be collected toward the end of the season, so this will be arranged for later.

K. H. Townsend.

RELEASE OF COTTON SAMPLES AFTER FUMIGATION.

HB—142

January 3, 1922.

The term "samples" includes both foreign and American cottons, as follows:

American.—Standards of American cotton put up by the Liverpool Cotton Association or other European exchanges as standard samples, similar to the official cotton standards of the United States.

Samples of individual bales returned to show or to determine type, grade, etc.

Foreign.—Foreign cottons of the two kinds indicated under "American."

Bale samples drawn by the Treasury Department for the purpose of determining the duty. Such samples are taken by the customs appraisers, after the cotton has been given a single or two-hour fumigation, and in an amount sufficient to determine the length of staple. They are retained for awhile in the appraisers' stores, later being destroyed or returned upon request to the importer.

In lieu of the present method of handling samples, the following practice is adopted, effective this date:

Samples will be allowed entry under permit, as in the past, at Boston, New York, San Francisco, and Seattle only.

Samples arriving at these ports will be given double fumigation; that is, they will remain in the fumigation chamber during two fumigation periods, a total of four hours. They will then be released from subsequent control by the Federal Horticultural Board.

A continuing permit will be issued for cotton samples, good until revoked.

Bale samples taken by customs appraisers, after single fumigation, if not destroyed, must be returned to an inspector of the board for a second fumigation before release.

The procedure herein authorized applies to samples only and does not apply to baled cotton.

C. L. Marlatt, *Chairman of Board.*

THE WHITE PINE BLISTER RUST.

BLISTER-RUST QUARANTINE VIOLATIONS—POLICY OF THE DEPARTMENT.

HB—148

APRIL 21, 1922.

The blister-rust quarantine is being enforced under an appropriation made to the Bureau of Plant Industry and by employees of that bureau working in cooperation with the Federal Horticultural Board of this department, the authority for the quarantine being the plant quarantine act of 1912.

During the first year or two of the enforcement of the blister-rust quarantine the Department of Agriculture adopted a very lenient policy toward violators and, on their promise and assurance that steps would be taken to see that no further violations should occur, prosecution was waived. The general effect of this policy was to very greatly increase the number of violations and instead of resulting in greater carefulness on the part of shippers, led apparently to increased carelessness. At the urgent representations, therefore, of the Blister Rust Office of the Bureau of Plant Industry, it was decided to recommend prosecution of all violators of the quarantine in the case of regularly established nursery firms, all of which have been fully informed of the quarantine. The policy of uniform prosecution of violators of the quarantine was also taken up with the American Association of Nurserymen and, while I believe no formal recommendations either for or against this proposal were made by the association, the department has been advised by many prominent nurserymen that the surest method of stopping such negligence and assuring the proper amount of care is in uniformly enforcing such prosecutions, and it has been pointed out that very rarely indeed has it been necessary to prosecute the same firm a second time. It is fully realized that most of these violations are unintentional and more or less accidental in the rush of business, often due to the negligence of temporary employees, and that probably few, if any, such shipments are made in willful violation of the quarantine. It must be remembered, however, that the introduction of the pine blister rust into the great pine forests of the West will be accomplished just as easily with a single diseased plant as with the shipment of hundreds or thousands of plants, and hence the rarity of such errors or the triviality of the shipment does not eliminate the risk.

It may be further properly pointed out that such posecution does not carry with it, necessarily, any stigma of intentional violation, but simply is a course which seems to be necessary in order to bring more emphatically to the attention of the nurserymen the need of adopting measures which will absolutely prevent such errors.

I think it will be appreciated that the department can not be pickers and choosers in such prosecutions and that either it must act uniformly with respect to all offenders or such prosecutions must be given up altogether, and in that case we might as well withdraw the quarantine and allow the pine blister rust to be freely distributed.

For the reasons above indicated, the department has been prosecuting all nurserymen violating the quarantine. Undoubtedly the course now being followed has made a tremendous difference in the number of violations, and if this most serious of all forest diseases is to be controlled and the great western pine forests are to be protected, the department can not afford to be negligent of any steps which can prevent or check its spread.

It is an unfortunate fact which adds to the burden of the department in enforcing the quarantine—a disagreeable duty in any event—that the penalties

are just as apt to strike the friends of the department and very often the personal friends of the officials who are required to enforce the quarantine as any others.

C. L. MARLATT, *Chairman, Federal Horticultural Board.*

QUARANTINE ON ACCOUNT OF THE WHITE-PINE BLISTER RUST.

NOTICE OF QUARANTINE No. 54.

(Effective on and after March 15, 1922.)

The fact has been determined by the Secretary of Agriculture, after hearing duly held as provided by law, and notice is hereby given, that a dangerous plant disease known as the white-pine blister rust (*Cronartium ribicola* Fischer), not heretofore widely prevalent or distributed within and throughout the United States, exists in the State of Washington.

Now, therefore, I, Henry C. Wallace, Secretary of Agriculture, under authority conferred by section 8 of the plant quarantine act of August 20, 1912 (37 Stat. 315), as amended by the act of Congress approved March 4, 1917 (39 Stat. 1134, 1165), do hereby quarantine the State of Washington and, by this Notice of Quarantine No. 54, effective on and after March 15, 1922, do order that no five-leafed pines—white pine (*Pinus strobus*), western white or silver pine (*P. monticola*), sugar pine (*P. lambertiana*), limber pine (*P. flexilis*), white-bark pine (*P. albicaulis*), bristle-cone pine (*P. aristata*), fox-tail pine (*P. balfouriana*), Mexican white pine (*P. strobiformis*), Ayacahuite pine (*P. ayacahuite, veitchii, bonapartea, loudoniana*), Swiss stone pine (*P. cembra, pumila, sibirica, coronans*), Himalayan or Bhotan pine (*P. excelsa, nepalensis, griffithii*), Korean pine (*P. koraiensis, mandschurica*), Japanese white pine (*P. parviflora, pentaphylla, morrisonicola, formosana*), Chinese white pine (*P. armandi, scipioniformis, mastersiana*), Balkan pine (*P. peuce*)—and no currant or gooseberry plants (*Ribes* and *Grossularia*) shall be moved or allowed to be moved interstate from the said State of Washington unless the establishment and enforcement by the said State of Washington of control measures in cooperation with the United States Department of Agriculture shall be deemed adequate, in the judgment of the Secretary of Agriculture, to effect the control and prevent the spread of the white-pine blister rust with respect to the following counties lying west of the crest of the Cascade Mountains, designated as a white-pine blister rust infected area: Clallam, Clarke, Cowlitz, Grays Harbor, Island, Jefferson, King, Kitsap, Lewis, Mason, Pacific, Pierce, San Juan, Skagit, Skamania, Snohomish, Thurston, Wahkiakum, and Whatcom.

In case such control measures shall be so established and enforced by the State as to the said infected area, the restrictions of this quarantine shall be confined and limited to the interstate movement of the aforesaid pines and currant and gooseberry plants from the area hereinabove designated as infected: *Provided*, That said infected area may be extended or reduced as found necessary by the Secretary of Agriculture. Due notice of any such extension or reduction will be given in writing to the transportation companies doing business in or through the State of Washington and by publication in a newspaper selected by the Secretary of Agriculture within the State.

Done at the city of Washington this 1st day of March, 1922.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.]

HENRY C. WALLACE,
Secretary of Agriculture.

BLISTER-RUST QUARANTINE EXTENDED TO COVER STATE OF WASHINGTON.

(Press notice.)

MARCH 9, 1922.

By an order of Secretary of Agriculture Wallace, effective March 15, the Federal quarantine to protect the white-pine forests of the West against the further spread of the blister rust has been extended to include the State of Washington. In view of the State quarantine, which became effective March 1, the Federal restrictions will apply to the interstate shipment of white pines, currant and gooseberry plants from the infested areas of the State only.

The infested area includes the following counties lying west of the crest of the Cascade Mountains: Clallam, Clarke, Cowlitz, Grays Harbor, Island, Jefferson, King, Kitsap, Lewis, Mason, Pacific, Pierce, San Juan, Skagit, Skamania, Snohomish, Thurston, Wahkiakum, and Whatcom. The Secretary reserves the right to extend or reduce the infested area if it is found necessary to do so.

Action by the Secretary was taken as a result of a public hearing held by the Federal Horticultural Board, in Washington, D. C., the latter part of January. Agents of the United States Department of Agriculture had discovered several blister-rust infestations, principally on black currants, in the Puget Sound region of Washington. Much concern was felt over the possibility of the disease spreading to the valuable commercial stands of western white and sugar pine forests of the Rocky Mountains and the Pacific coast regions.

QUARANTINE ORDER NO. 7—PERTAINING TO WHITE-PINE BLISTER RUST IN WASHINGTON.

Whereas the fact has been determined that a dangerous and injurious disease known as the white-pine blister rust (*Peridermium strobi* Kalib) exists west of the Cascade Mountains near Puget Sound, in the State of Washington; and

Whereas there is danger of the introduction of this disease into the white-pine forests of the State of Washington through shipments of five-leafed pines and currants (especially black currants) and gooseberry plants (see Quarantine 2):

Now, therefore, I, E. L. French, director of agriculture of the State of Washington, by virtue of the authority vested upon me by chapter 105, session laws of 1921, do hereby declare and proclaim a quarantine prohibiting the shipment or movement in Washington of all white pine (*Pinus strobus*), stone pine (*P. cembra*), timber pine (*P. flexilis*), or any other five-leaved pines, currants and gooseberry plants (Ribes and Grossularia) within or from that part of the State of Washington lying west of the crest of the Cascade Mountains through or into the rest of the State of Washington. In addition, since the English black currant (*Ribes nigrum*) is an especially dangerous host of the white-pine blister rust, the destruction is hereby ordered of all such black-currant plants found growing in the counties of Whatcom, San Juan, Skagit, Island, Snohomish, King, Kitsap, Mason, Jefferson, and Clallam.

All horticultural inspectors are hereby required and instructed to intercept any shipment or movement in the State of Washington of five-leaved pines, currants and gooseberry plants above mentioned, and to condemn and destroy any black currants found growing in counties mentioned.

If any such articles as hereinbefore mentioned are moved or grown in the State of Washington in violation of this quarantine they must at once be destroyed or returned to the shipper at his expense. Any violation of these orders will be dealt with according to law.

This quarantine shall take effect on and after March 1, 1922.

(Signed) E. L. FRENCH,
Director of Agriculture.

Approved by—

LOUIS F. HART, *Governor.*

Dated, Olympia, Wash., January 24, 1922.

THE EUROPEAN CORN BORER.

QUARANTINE ON ACCOUNT OF EUROPEAN CORN BORER.

NOTICE OF QUARANTINE No. 43 (second revision).

[Effective on and after May 1, 1922. Amends and supersedes Quarantine No. 43, revised.]

The fact has been determined by the Secretary of Agriculture, and notice is hereby given, that an injurious insect, the European corn borer (*Pyrausta nubilalis* Hübn.), new to and not heretofore widely prevalent or distributed within and throughout the United States, exists in the States of Massachusetts, New Hampshire, New York, Pennsylvania, Ohio, and Michigan.

Now, therefore, I, Henry C. Wallace, Secretary of Agriculture, under authority conferred by section 8 of the plant quarantine act of August 20, 1912 (37 Stat. 315), as amended by the act of Congress approved March 4, 1917 (39 Stat. 1134, 1165), do hereby quarantine the States of Massachusetts, New Hampshire, New York, Pennsylvania, Ohio, and Michigan, and by this Notice of Quarantine No. 43 (second revision) do order that the following articles shall not be moved or allowed to be moved interstate from any areas in said quarantined States designated, in the regulations supplemental hereto, as the areas infested with the corn borer, in manner or method or under conditions other than those prescribed in the rules and regulations hereinafter made and amendments thereto: *Provided*, That the limitation of the restrictions of this quarantine, as provided in the rules and regulations supplemental hereto, to the areas in a quarantined State now, or which may hereafter be, designated by the Secretary of Agriculture as infested by the European corn borer, shall be conditioned upon the establishment and enforcement by the State of such control measures in cooperation with the United States Department of Agriculture with respect to the designated infested areas as in the judgment of the Secretary of Agriculture shall be deemed adequate to effect the control and prevent the spread of the European corn borer.

(1) Corn and broom corn (including all parts of the stalk), all sorghums, sudan grass, celery, green beans in the pod, beets with tops, spinach, rhubarb, oat and rye straw as such or when used as packing, cut flowers or entire plants of chrysanthemum, aster, cosmos, zinnia, hollyhock, and cut flowers or entire plants of gladiolus and dahlia, except the bulbs thereof, without stems, from infested areas in Massachusetts and New Hampshire.

(2) Corn and broom corn (including all parts of the stalk), all sorghums, and sudan grass from infested areas in New York, Pennsylvania, Ohio, and Michigan.

Done at the city of Washington this 7th day of April, 1922.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.] HENRY C. WALLACE,
Secretary of Agriculture.

RULES AND REGULATIONS SUPPLEMENTAL TO NOTICE OF QUARANTINE NO. 43 (SECOND REVISION).

Regulation 1. Definitions.

For the purpose of these regulations the following words, names, and terms shall be construed, respectively, to mean:

(*a*) Corn borer: The insect known as the European corn borer (*Pyrausta nubilalis* Hübn).

(*b*) Quarantined area: Any State quarantined by the Secretary of Agriculture upon determination by him that the corn borer exists therein.

(*c*) Infested area: Those portions of any quarantined State designated by the Secretary of Agriculture as infested with the corn borer.

(*d*) Inspector: An inspector of the United States Department of Agriculture.

Regulation 2. Plants and plant products subject to restriction.

The restrictions on the movement of plants and plant products covered in this Notice of Quarantine No. 43 (second revision) and in the rules and regulations supplemental thereto shall apply to all products enumerated in the notice of quarantine originating in or moving from the areas in the quarantined States now or hereafter designated by the Secretary of Agriculture as infested areas.

No restrictions are placed by this quarantine and the regulations supplemental thereto on the interstate movement of the articles enumerated therein from all points in the quarantined States outside of the areas now or hereafter designated by the Secretary of Agriculture as infested areas.

No restrictions are placed by this quarantine and the regulations supplemental thereto on the interstate movement of the articles enumerated in this notice of quarantine when they shall have been manufactured or processed in such manner as to eliminate risk of carriage of the corn borer, nor of clean shelled corn, and clean seed of broom corn.

Regulation 3. Infested areas.

The fact has been determined by the Secretary of Agriculture that the corn borer exists in the areas designated below in the States of Massachusetts, New Hampshire, New York, Pennsylvania, Ohio, and Michigan, and such cities and towns (or townships) in each State are designated as infested areas for the purpose of these regulations:

MASSACHUSETTS.—Barnstable, Bourne, Brewster, Chatham, Dennis, Eastham, Falmouth, Harwich, Orleans, Provincetown, Sandwich, Truro, Wellfleet, and Yarmouth, in *Barnstable County;* Acushnet, Easton, Fairhaven, New Bedford, Raynham, and Taunton, in *Bristol County;* Amesbury, Andover, Beverly, Boxford, Danvers, Essex, Georgetown, Gloucester, Groveland, Hamilton, Haverhill, Ipswich, Lawrence, Lynn, Lynnfield, Manchester, Marblehead, Merrimac, Methuen, Middleton, Nahant, Newbury, Newburyport, North Andover, Peabody, Rockport, Rowley, Salem, Salisbury, Saugus, Swampscott, Topsfield, Wenham, and West Newbury, in *Essex County;* Arlington, Bedford, Belmont, Billerica, Burlington, Cambridge, Carlisle, Chelmsford, Concord, Dracut, Everett, Framingham, Lexington, Lincoln, Lowell, Malden, Maynard, Medford, Melrose, Natick, Newton, North Reading, Reading, Sherborn, Somerville, Stoneham, Sudbury, Tewksbury, Tyngsboro, Wakefield, Waltham, Watertown, Wayland, Westford, Weston, Wilmington, Winchester, and Woburn, in *Middlesex County;* Avon, Braintree, Brookline, Canton, Cohasset, Dedham, Dover, Holbrook, Medfield, Millis, Milton, Needham, Norwood, Quincy, Randolph, Sharon, Stoughton, Wellesley, Westwood, and Weymouth, in *Norfolk County;* Abington, Bridgewater, Brockton, Carver, Duxbury, East Bridge-

water, Halifax, Hanover, Hanson, Hingham, Hull, Kingston, Lakeville, Marion, Marshfield, Mattapoisett, Middleboro, Norwell, Pembroke, Plymouth, Plympton, Rochester, Rockland, Scituate, Wareham, West Bridgewater, and Whitman, in *Plymouth County;* Boston, Chelsea, Revere, and Winthrop, in *Suffolk County.*

MICHIGAN.—Erie, La Salle, and Monroe, in *Monroe County.*

NEW HAMPSHIRE.—Atkinson, Hampton, Hampton Falls, Kingston, New Castle, Newington, North Hampton, Plaistow, Portsmouth, Rye, Salem, and Seabrook, in *Rockingham County.*

NEW YORK (Eastern).—Albany, Berne, Bethlehem, Cohoes, Colonie, Guilderland, Knox, New Scotland, Rensselaerville, and Westerloo, in *Albany County;* Bleecker, Broadalbin, Caroga, Ephratah, Johnstown, Mayfield, Northampton, and Perth, in *Fulton County;* Benson, Hope, Lake Pleasant, and Wells, in *Hamilton County;* Amsterdam, Charleston, Florida, Glen, Mohawk, Palatine, and Root, in *Montgomery County;* Brunswick, East Greenbush, North Greenbush, Poestenkill, Schaghticoke, and Troy, in *Rensselaer County;* Ballston, Charlton, Clifton Park, Corinth, Day, Edinburg, Galway, Greenfield, Hadley, Half Moon, Malta, Milton, Northumberland, Providence, Saratoga, Saratoga Springs, Stillwater, and Wilton, in *Saratoga County;* Duanesburg, Glenville, Niskayuna, Princetown, Rotterdam, and Schenectady, in *Schenectady County;* Cobleskill, Esperance, Middleburg, Schoharie, and Wright, in *Schoharie County;* Easton, Ft. Edward, Greenwich, and White Creek, in *Washington County;* Luzerne, in *Warren County.*

NEW YORK (Western).—Ashford, Dayton, East Otto, Leon, Otto, Perrysburg, and Persia, in *Cattaraugus County;* Arkwright, Charlotte, Chautauqua, Cherry Creek, Dunkirk, Ellery, Ellicott, Gerry, Hanover, Mina, Pomfret, Portland, Ripley, Sheridan, Sherman, Stockton, Villenova and Westfield, in *Chautauqua County;* Amherst, Aurora, Boston, Brant, Buffalo, Clarence, Collins, Concord, Cheektowaga, East Hamburg, Eden, Elma, Evans, Grand Island, Hamburg, Marilla, North Collins, Tonawanda, and West Seneca, in *Erie County;* Niagara and Wheatfield, in *Niagara County.*

OHIO.—Ashtabula, Conneaut, Geneva, Kingsville, Monroe; and Saybrook, in *Ashtabula County;* Cleveland, Dover, Euclid, Rockport, and West Park, in *Cuyahoga County;* Berlin, Huron, Kelleys Island, Portland, and Vermillion, in *Erie County;* Concord, Madison, Mentor, Painesville, Perry, and Willoughby, in *Lake County;* Avon, Avon Lake, Black River, Brownhelm, Elyria, and Sheffield, in *Lorain County;* Jerusalem, Oregon, Toledo, and Washington, in *Lucas County;* Bay, Benton, Carroll, Catawba Island, Danbury, Erie, Middle Bass Island, North Bass Island, Portage, and South Bass Island, in *Ottawa County.*

PENNSYLVANIA.—Fairview, Girard, Greene, Greenfield, Harbor Creek, McKean, Mill Creek, North East, Presque Isle Peninsula, Springfield, Summit, and Venango, in *Erie County.*

The infested areas may be extended or reduced, as found necessary by the Secretary of Agriculture. Due notice of any extension or reduction and the areas affected thereby will be given in writing to the transportation companies doing business in or through the State in which the infested area is located, and by publication in newspapers selected by the Secretary of Agriculture within the State in which the areas affected are located.

Regulation 4. Inspection and certification a condition of movement from infested areas.

Corn and broom corn (including all parts of the stalk), all sorghums, and sudan grass from infested areas in New York, Pennsylvania, Ohio, and Michigan; and corn and broom corn (including all parts of the stalk), all sorghums,

sudan grass, celery, green beans in the pod, beets with tops, spinach, rhubarb, oat and rye straw as such or when used as packing, cut flowers or entire plants of chrysanthemum, aster, cosmos, zinnia, hollyhock, and cut flowers or entire plants of gladiolus and dahlia, except the bulbs thereof, without stems, from infested areas in Massachusetts and New Hampshire, shall not be moved or allowed to move interstate to any point outside the infested areas quarantined for the corn borer unless and until such plants and plant products have been inspected by the United States Department of Agriculture and certified to be free from the corn borer. In the case of any of the articles enumerated in this regulation where absolute freedom from infestation can not be determined by the inspector of the Department of Agriculture, certification will be refused: *Provided*, That in the case of corn and broom corn (including all parts of the stalk), all sorghums, sudan grass, cut flowers or entire plants of chrysanthemum, aster, cosmos, zinnia, hollyhock, and cut flowers or entire plants of gladiolus and dahlia, except the bulbs thereof, without stems, this quarantine and these regulations shall apply throughout the year; in the case of all other products, for the period between June 1 and December 31.

Regulation 5. Marking and certification a condition of interstate transportation.

Every car, box, bale, or other container of plants and plant products of which inspection is required by these regulations shall be plainly marked with the name and address of the consignor and the name and address of the consignee, and shall bear a certificate showing that the contents have been inspected by the United States Department of Agriculture and found to be free from corn-borer infestation.

The inspection certificates in the case of carload and other bulk shipments shall accompany the waybills, conductors' manifests, memoranda, or bills of lading pertaining to such shipments.

Certificates of inspection will issue only for plants and plant products which have been actually inspected by the United States Department of Agriculture: *Provided*, That when in the case of individual premises or districts within an infested area in any of the quarantined States it shall be determined by competent inspection that the corn borer does not infest any of the cultivated products grown in such premises or districts and that said premises or districts have been maintained in such condition of freedom from weeds or vegetable growths other than the cultivated products designated as to prevent possibility of occurrence of the corn borer through such agencies, a permit may be issued (valid until revoked) by the inspector of the Department of Agriculture stating that such premises or districts have been inspected and found free from the corn borer and free from weeds or other extraneous vegetation capable of harboring the corn borer, and authorizing the shipment from said premises or districts of any of the articles subject to this quarantine grown therein. Copies of such permits shall be attached to small packages, or in the case of bulk shipments, to waybills, conductors' manifests, memoranda, or bills of lading pertaining thereto, and may be accepted by transportation companies in lieu of certificates of inspection.

Regulation 6. Conditions under which plants and plant products originating outside of the infested areas may be shipped from points within the infested areas.

Plants and plant products of which the interstate movement is restricted by these regulations which originate outside of the infested area quarantined for the corn borer may be shipped interstate from points within the infested areas to points outside such areas under permit from the Secretary of Agriculture. Permits will issue only for plants and plant products which are not infested with the corn borer, and transportation companies shall not accept or move

interstate from within the infested areas such plants and plant products originating outside the infested areas unless each shipment is accompanied by a permit issued by the United States Department of Agriculture.

Regulation 7. Conditions governing inspection and issuance of certificates.

Persons intending to move or allow to be moved interstate plants and plant products for which certificates of inspection are required by these regulations will make application therefor as far as possible in advance of the probable date of shipment. Applications should show the nature and quantity of the plants or plant products which it is proposed to move, together with their exact location, and, if practicable, the contemplated date of shipment. Applicants for inspection will be required to assemble the articles to be inspected and so to place them that they can be readily examined. If not so placed inspection may be refused. All charges for storage, cartage, and labor incident to inspection other than the services of inspectors shall be paid by the shipper.

Regulation 8. Thorough cleaning required of cars, boats, and other vehicles before moving interstate.

Cars, boats, and other vehicles which have been used in transporting within the infested areas plant products covered by these regulations, or any other articles which may hereafter be made subject thereto, shall not be moved or allowed to move interstate unless the same shall have been thoroughly swept out and cleaned by the carrier at the point of unloading or destination of all litter and rubbish from such regulated articles. No litter, rubbish, or refuse from any such plants and plant products shall be moved or allowed to move interstate.

Regulation 9. Shipments by United States Department of Agriculture.

This quarantine shall not apply to the movement by the United States Department of Agriculture of the products named for experimental or scientific purposes.

This notice of quarantine, effective May 1, 1922, amends and supersedes Notice of Quarantine No. 43, revised, promulgated October 29, 1921, as amended, and shall be in force until further notice.

Done at the city of Washington this 7th day of April, 1922.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.] HENRY C. WALLACE,
Secretary of Agriculture.

CORN-BORER QUARANTINE REVISED.

(Press notice.)

APRIL 14, 1922.

The Federal quarantine on account of the European corn borer, promulgated October 29, 1921, has been revised effective May 1, to make it possible to limit the application of the restrictions under the quarantine to the areas in the States concerned actually designated as infested by this pest. The revision consists in incorporating a proviso which conditions the limitation of the quarantine to the areas in any State designated as infested upon the enforcement by the State of quarantine control measures adequate to prevent spread within the State of the corn borer from such infested areas. In other words, unless the State takes control action the only course left open for the department is to enforce the quarantine as to the State as a whole. No change in the regulations under this quarantine is necessitated by the addition of this proviso. The States now having infested areas are Massachusetts, New Hampshire, New York, Pennsylvania, Ohio, and Michigan. All except Ohio and Michigan have already established State quarantines which enable these States to have the

advantage of this proviso and it is expected that Ohio and Michigan will promptly take the action necessary for the limitation of the Federal restriction to the infested portions of these States.

The necessity for such State cooperation comes from the fact that the Federal quarantine may control only interestate movement and therefore shipments within any State of material originating in the infested area may be controlled only under State authority.

THE GIPSY MOTH AND BROWN-TAIL MOTH.

MODIFICATION OF GIPSY MOTH AND BROWN-TAIL MOTH QUARANTINE.

AMENDMENT No. 3 TO REGULATIONS SUPPLEMENTAL TO NOTICE TO QUARANTINE No. 45.

(Effective on and after July 1, 1922.)

Under authority conferred by the plant quarantine act of August 20, 1912 (37 Stat. 315), as amended by the act of Congress approved March 4, 1917 (39 Stat. 1134, 1165), it is ordered that regulation 3 of the Rules and Regulations Supplemental to Notice of Quarantine No. 45, on account of the gipsy moth and brown-tail moth, which became effective July 1, 1920, as amended effective July 1, 1921, and January 1, 1922, be, and the same is hereby, further amended to read as follows:

Regulation 3. Infested areas.

The following towns and all the territory between said towns and the Atlantic Ocean are designated as gipsy-moth infested areas:

Steuben, Cherryfield, Deblois, 16, Eastbrook, Waltham, Mariaville, Amherst, Aurora, Plantation 33, Greenfield, Greenbush, Milford, city of Oldtown, Hudson, Bradford, Charleston, Atkinson, Foxcroft, Dover, Garland, Dexter, Corinna, St. Albans, Hartland, Athens, Brighton, Bingham, Solon, Embden, New Portland, Freeman, Salem, Madrid, Phillips, Weld, Carthage, Mexico, Rumford, Andover, Newry, and Gilead, *Maine;* Shelburne, Gorham, Bean's Purchase, Jackson, Bartlett, Hart's Location, Carroll, Jefferson, Whitefield, and Dalton, *New Hampshire;* Lunenburg, *Vermont;* Littleton and Monroe, *New Hampshire;* Barnet, Danville, Peacham, Marshfield, Groton, Orange, Washington, Corinth, West Fairlee, Strafford, Tunbridge, Royalton, Pomfret, Bridgewater, Plymouth, Reading, Cavendish, Chester, Andover, Weston, Landgrove, Londonderry, Winhall, Stratton, Dover, Wilmington, Readsboro, Stamford, and Pownal, *Vermont;* Williamstown, Hancock, Richmond, West Stockbridge, Alford, Egremont, and Mount Washington, *Massachusetts;* Salisbury, Canaan, Norfolk, Winchester, Torrington, Harwinton, Thomaston, Waterbury, Wolcott, Southington, Berlin, Middletown, Chatham, Colchester, Salem, and East Lyme, *Connecticut;* New Shoreham, *Rhode Island.*

For the purpose of inspection and transportation the above-designated towns and territory quarantined for the gipsy moth are divided into two areas, to be known as the lightly infested area and the generally infested area.

The following towns comprise the lightly infested area:

Steuben, Gouldsborough, Winter Harbor, Sullivan, Sorrento, Hancock, Lamoine, Eden, Mount Desert, Southwest Harbor, Tremont, Swans Island, Trenton, Isle au Haut, Stonington, Deer Isle, Brooklin, Sedgwick, Bluehill, Surry, City of Ellsworth, Mariaville, Waltham, VIII, East Brook, Franklin, 9, 10, Unionville, Cherryfield, Deblois, 16, Amherst, Aurora, Plantation No. 33, Plantation No. 32, Greenfield, Greenbush, Milford, Bradley, Eddington, Clifton,

Otis, Dedham, Holden, city of Brewer, Orono, Veazie, city of Oldtown, city of Bangor, Orrington, Bucksport, Orland, Penobscot, Castine, Brookville, North Haven, Vinal Haven, Islesboro, Searsport, Stockton Springs, Prospect, Frankfort, Winterport, Newburgh, Hampden, Hermon, Carmel, Levant, Kenduskeag, Glenburn, Hudson, Corinth, Charleston, Bradford, Atkinson, Dover, Foxcroft, Garland, Dexter, Corinna, Exeter, Stetson, Newport, Plymouth, Etna, Dixmont, Jackson, Monroe, Brooks, Swanville, Waldo, city of Belfast, Northport, Lincolnville, Camden, Hope, Appleton, Searsmont, Liberty, Belmont, Morrill, Montville, Palermo, Freedom, Knox, Thorndike, Unity, Albion, Burnham, Troy, Detroit, Palmyra, Pittsfield, Hartland, St. Albans, Athens, Brighton, Bingham, Solon, Cornville, Madison, Norridgewock, Skowhegan, Canaan, Clinton, Fairfield, Smithfield, Oakland, Waterville, Benton, Winslow, Vassalborough, China, Somerville, Washington, Windsor, Sidney, Manchester, Monmouth, Winthrop, Readfield, Wayne, Fayette, Mount Vernon, Belgrade, Rome, Vienna, Chesterville, New Sharon, Mercer, Stark, Industry, Anson, New Vineyard, Embden, New Portland, Freeman, Strong, Salem, Madrid, Phillips, Avon, Temple, Farmington, Wilton, Jay, Livermore, East Livermore, Leeds, Greene, Turner, Hebron, Oxford, Paris, Buckfield, Hartford, Sumner, Canton, Peru, Franklin, Dixfield, Mexico, Carthage, Perkins, IV, Weld, Andover, Rumford, Newry, Bethel, Milton, Woodstock, Greenwood, Albany, Norway, Otisfield, Harrison, Waterford, Sweden, Lovell, Stow, Stoneham, Mason, Fryeburg Academy Grant, Batchelders Grant, and Gilead, *Maine;* Chatham, Bean's Purchase, Shelburne, Gorham, Jackson, Bartl. Co., Hart's Location, Livermore, Lincoln, Bethlehem, Carroll, Jefferson, Whitefield, Dalton, Franconia, Easton, Landaff, Lisbon, Littleton, Lyman, Monroe, and Bath, *New Hampshire;* Lunenburg, Danville, Barnet, Peacham, Marshfield, Groton, Ryegate, Newbury, Topsham, Orange, Washington, Corinth, Bradford, Fairlee, West Fairlee, Thetford, Strafford, Tunbridge, Royalton, Sharon, Norwich, Hartford, Pomfret, Bridgewater, Woodstock, Hartland, Windsor, West Windsor, Reading, Plymouth, Cavendish, Weathersfield, Springfield, Chester, Andover, Weston, Landgrove, Londonderry, Windham, Grafton, Rockingham, Westminster, Athens, Brookline, Townshend, Jamaica, Windhall, Stratton, Wardsboro, Dover, Newfane, Putney, Dummerston, Brattleboro, Marlboro, Wilmington, Pownal, Stamford, Readsboro, Whitingham, Halifax, and Guilford, *Vermont;* Williamstown, Clarksburg, North Adams, Adams, Florida, Monroe, Rowe, Heath, Charlemont, Buckland, Hawley, Savoy, Cheshire, New Ashford, Lanesborough, Hancock, Pittsfield, Dalton, Windsor, Hinsdale, Peru, Worthington, Cummington, Plainfield, Ashfield, Goshen, Chesterfield, Williamsburg, Conway, Westhampton, Southhampton, Montgomery, Huntington, Russell, Blandford, Chester, Middlefield, Becket, Otis, Washington, Tyringham, Monterey, Lee, Lenox, Richmond, Stockbridge, West Stockbridge, Great Barrington, Alford, Egremont, Mount Washington, Sheffield, New Marlborough, Sandisfield, Tolland, and Granville, *Massachusetts;* Salisbury, Canaan, North Canaan, Norfolk, Colebrook, Winchester, Torrington, Harwinton, Thomaston, Waterbury, Wolcott, Plymouth, Bristol, Burlington, New Hartford, Barkhamsted, Hartland, Granby, Simsbury, Canton, Avon, Farmington, Plainville, Southington, Berlin, New Britain, Newington, West Hartford, Bloomfield, East Granby, Suffield, Windsor Locks, Windsor, Hartford, Wethersfield, Rocky Hill, Cromwell, Middletown, Portland, Glastonbury, Chatham, Marlboro, Colchester, Hebron, Andover, Columbia, Lebanon, Salem, East Lyme, Waterford, Montville, Bozrah, Franklin, Sprague, Norwich, Lisbon, Preston, Ledyard, Groton, New London, Stonington, North Stonington, Griswold, and Voluntown, *Connecticut;* New Shoreham, *Rhode Island.*

All other towns shall be classed as the generally infested area.

The following towns and all the territory between said towns and the Atlantic Ocean are designated as brown-tail moth infested area:

Swans Island, Brooklin, Bluehill, Trenton, Surry, Orland, Prospect, Frankfort, Winterport, Hampden, city of Bangor, Hermon, Levant, Exeter, Stetson, Carmel, Newburg, Dixmont, Plymouth, Troy, Burnham, Pittsfield, Canaan, Cornville, Skowhegan, Norridgewock, Stark, Anson, Industry, Farmington, Wilton, Dixfield, Peru, Rumford, Bethel, Gilead, Batchelders Grant, Stow, Fryeburg, Brownfield, and Porter, *Maine;* Freedom, Ossipee, Moultonborough, Center Harbor, New Hampton, Bridgewater, Bristol, Alexandria, Danbury, Wilmot, Warner, Henniker, Deering, Antrim, Hancock, Peterborough, Sharon, and Rindge, *New Hampshire;* Winchendon, Gardner, Westminster, Princeton, Holden, Paxton, Worcester, Millbury, Sutton, Douglas, Uxbridge, Blackstone, Bellingham, Wrentham, Plainville, North Attleboro, Attleboro, Seekonk, Swansea, Somerset, Fall River, and Westport, *Massachusetts.*

This amendment supersedes amendment No. 1 to Regulations Supplemental to Notice of Quarantine No. 45, which became effective July 1, 1921, and amendment No. 2 to said regulations, which became effective January 1, 1922, and shall be effective on and after July 1, 1922.

Done in the District of Columbia this 15th day of June, 1922.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.] C. W. PUGSLEY,
Acting Secretary of Agriculture.

FEDERAL QUARANTINE AREA WIDENED IN NEW ENGLAND.

(Press notice.)

JUNE 22, 1922.

Extension of the Federal quarantine in New England to prevent the spread of the gipsy moth, effective July 1, is announced by the Federal Horticultural Board of the United States Department of Agriculture. At the same time more than 2,300 square miles in the part of this area that is quarantined against the brown-tail moth will be freed from quarantine, making a total reduction of more than 50 per cent since 1914.

Under the new regulation of the board, the quarantine against the gipsy moth is extended to include the whole of the State of Massachusetts, and 13 towns in Maine, 2 in New Hampshire, 11 in Vermont, and 67 in Connecticut are added to the territory in those States already under quarantine. Seven towns are removed from the quarantine—Argyle, Roxbury, and Riley in Maine, Lancaster and Northumberland in New Hampshire, and Plainfield and Barnard in Vermont.

The towns now added to the area quarantined against the gipsy moth are:

In Maine: Steuben, Unionville, Cherryfield, Franklin, Deblois, Dover, Foxcroft, Brighton, Madrid, VIII, 9, 10, and 16.

In New Hampshire: Carroll and Jefferson.

In Vermont: Washington, Tunbridge, Plymouth, Reading, Stratton, Guilford, Halifax, Whitingham, Readsboro, Stamford, and Pownal.

In Connecticut: Salisbury, North Canaan, Canaan, Norfolk, Colebrook, Winchester, Torrington, Harwinton, Thomaston, Waterbury, Plymouth, Wolcott, Hartland, Barkhamsted, New Hartford, Burlington, Bristol, Southington, Plainfield, Farmington, Avon, Canton, Granby, Simsbury, Suffield, East Granby, Windsor Locks, Windsor, Bloomfield, Hartford, West Hartford, Newington, Wethersfield, Rocky Hill, New Britain, Berlin, Cromwell, Middletown, Enfield, East Windsor, South Windsor, Ellington, Tolland, Willington, Ashford, Vernon, East Hartford, Manchester, Bolton, Coventry, Glastonbury, Andover, Colum-

bia, Hebron, Marlboro, Portland, Chatham, Colchester, Lebanon, Franklin, Sprague, Lisbon, Salem, Montville, East Lyme, Waterford, and New London.

In Massachusetts: All towns not hitherto quarantined.

Under the Federal regulations Christmas greens, nursery stock, forest products, and stone and quarry products are required to be inspected before shipment to places outside the area.

During the last year careful scouting of the territory immediately outside the area known to be infested by the gipsy moth showed that only a slight spread of the pest took place in Maine, New Hampshire, and Vermont. In Massachusetts and Connecticut the westward spread of the insect has been greater than heretofore. Indications are that favorable winds were responsible for this.

A limited amount of work was done during the last year to determine the area infested by the brown-tail moth. As a result it was possible to reduce the size of the area. Conditions during the winter unfavorable to the pest, together with the effective work of imported parasites, combined in some sections with thorough hand methods of control, were responsible for holding the insect in check.

CERTAIN RAILROAD RIGHTS OF WAY AND RAILROAD YARDS IN CUBA TO BE KEPT FREE OF HOST PLANTS OF THE CITRUS BLACK FLY.

MAY 3, 1922.

The honorable the SECRETARY OF STATE.

DEAR MR. SECRETARY: At the public hearing conducted in Washington December 20, 1920, for the purpose of establishing a quarantine to prevent the entry of the citrus black fly, a dangerous citrus and other plant pest, widely established in Cuba and in certain other West Indian islands and Central American countries, the official representatives of the Cuban Government in attendance at this hearing agreed, as a basis for certain freedom of movement of Cuban fruit by rail into the United States, that the department of agriculture of the Cuban Government would undertake to have removed from the right of way of Cuban railroads on which such movement should originate the plants which are especially hosts of this pest, and to keep such rights of way free from further growth of such plants.

The official correspondence through your department indicates this action, your attention being particularly invited to a letter from this department of February 24, 1921, the response of the State Department thereto of March 7, and the report of the action of the Cuban Government transmitted with the State Department's letter of April 4 inclosing a dispatch from Philander L. Cable, chargé d'affaires ad interim of this Government's legation at Habana, transmitting a copy of the official decree issued by the Secretary of Agriculture of Cuba March 17, 1921, in which the method of procedure for the cleaning up of rights of way and railroad yards in the infested districts of Cuba is prescribed in order to exempt from disinfection the railway cars and ferries from Habana.

These requirements were promptly carried out by the Cuban Government in a manner satisfactory to this department, but the department has now information indicating that this control has been in a measure discontinued, and that an unsatisfactory situation is developing with respect to the presence along such rights of way and railroad yards of host plants of the citrus black fly. I have the honor to suggest, therefore, that you communicate with the American minister in Habana and request him to present the need of main-

taining freedom of such rights of way and railroad yards from the presence of host plants of the citrus black fly as a condition of the continued unrestricted entry of fruits and vegetables under the quarantine promulgated by this department.

In connection with this request it is pernaps also desirable to have him bring to the attention of the Cuban department of agriculture the necessity of compliance with another provision of this quarantine, namely, that packages of fruits and vegetables must be free from foliage or plant débris of any kind, and that when shipped in cars to Key West such cars must be thoroughly cleaned of all such plant material or litter likely to carry the black fly.

The quarantine in question and also a memorandum further explanatory of the situation in Cuba with respect to this pest are transmitted herewith for the information of the American minister.

Sincerely yours,

HENRY C. WALLACE, *Secretary.*

REGULATIONS GOVERNING THE IMPORTATION OF POTATOES INTO THE UNITED STATES.

Under the Provisions of the Order of the Secretary of Agriculture Issued December 22, 1913.

(Revised February 28, 1922; effective March 1, 1922.)

LETTER OF TRANSMITTAL.

UNITED STATES DEPARTMENT OF AGRICULTURE,
FEDERAL HORTICULTURAL BOARD,
Washington, D. C., February 17, 1922.

Hon. HENRY C. WALLACE,
Secretary of Agriculture.

SIR: The Federal Horticultural Board respectfully submits the following revision of the regulations governing the importation of potatoes into the United States under the provisions of the order of the Secretary of Agriculture issued December 22, 1913. This revision supersedes the regulations as revised February 16, 1921 and involves a revision of regulation 2 only. The purpose of the modification of regulation 2 is to permit the entry of potatoes only from countries free from potato wart or other injurious potato diseases and insect pests new to or not widely prevalent or distributed within and throughout the United States. In other words, it does not seem wise or desirable to permit the entry of potatoes from any district of a country which is known to be invaded as to other districts by the potato wart or other dangerous potato pests. The potato wart, particularly, is so insidious a disease that certification of freedom of a province or district of an invaded country will always be open to a reasonable doubt. For this reason, in the administration of the quarantine hitherto, no permits have been issued for the importation of potatoes except as to countries believed to be entirely free from this potato disease. It seems desirable, therefore, to have this limitation clearly indicated in the regulation. The revision of regulation 2 will, therefore, not involve any restrictions not hitherto enforced on the entry of foreign potatoes.

C. L. MARLATT,
Chairman, Federal Horticultural Board.

4317—22——6

REGULATIONS GOVERNING THE IMPORTATION OF POTATOES INTO THE UNITED STATES, UNDER THE PROVISIONS OF THE ORDER OF THE SECRETARY OF AGRICULTURE ISSUED DECEMBER 22, 1913.

Regulation 1. Definition.

For the purpose of these regulations the term "potato" shall be understood as meaning the common or Irish potato (*Solanum tuberosum*) and its horticultural varieties.

Regulation 2. General conditions governing potato importations.

Except as provided under regulation 7, potatoes will be admitted from any country when it is determined by such field inspection as shall be approved as adequate by the Federal Horticultural Board, that such country is free from potato wart and other injurious potato diseases and insect pests new to or not widely prevalent or distributed within and throughout the United States, and such country must further agree to examine and certify all potatoes offered for export in compliance with these regulations: *Provided*, That the entry of potatoes will not be permitted from any country unless such country has an effective quarantine prohibiting the entry into such country of potatoes from any country known to be invaded by the potato wart or other injurious potato diseases or insect pests new to or not widely prevalent or distributed within and throughout the United States.

Entry of potatoes will not be allowed unless the invoice is accompanied by an original certificate and unless each container bears a copy certificate in accordance with regulation 5.

Potatoes will be admitted into the United States only through the port designated in the permit.

The entry of potatoes will not be permitted except where the shipments pass directly from the country of origin to the port of entry in the United States: *Provided*, That when transshipment is necessary at a port of a country under quarantine such transshipment shall be made by lighters from boat to boat in the harbor without landing the potatoes, and the consular invoice of place of origin must follow the shipment from original port of departure to the port of entry in the United States.

No shipment of potatoes will be permitted entry until it has been examined by an inspector of the Department of Agriculture and found or believed to be free from the potato wart and other injurious potato diseases and insect pests.

Shipments of potatoes certified as provided herein found to be infested with potato wart or other injurious potato diseases, or with insect pests, will be refused entry.

All charges for storage, cartage, and labor incident to inspection, other than the services of inspectors, shall be paid by the importer.

Except in case of bulk shipments, potatoes shall be contained only in bags, boxes, barrels, or other containers that have not previously been used for potatoes.

Regulation 3. Applications for permits for importation of potatoes.

Persons contemplating the importation of potatoes shall first make application to the Federal Horticultural Board, Department of Agriculture, Washington, D. C., for a permit, stating in the application the name and address of the exporter, the country and locality where grown, the port of departure (or port of consular invoice), the proposed port of entry, and the name and address of the importer in the United States to whom the permit should be sent.

Applications for permits must be made in advance of the shipment of the potatoes.

Applications may be made by telegraph, in which case the information required above must be given.

FORM OF APPLICATION FOR PERMIT TO IMPORT POTATOES.

_____, 19—.

To the Federal Horticultural Board, Washington, D. C.

SIRS: A permit is requested for the importation of potatoes, as described below, during the period_____, 19—, to June 30, 19—:

Quantity.	Probable date of shipment.

Name and address of exporter_____
Country where grown _____
Locality where grown_____
Port of departure_____
Port of entry_____
Name and address of person (either applicant or his agent or broker) to whom permit should be mailed_____

Very respectfully,

_____
(Name of applicant.)

_____
(Address.)

Regulation 4. Permits for entry of potatoes.

On approval by the Secretary of Agriculture of an application for the importation of potatoes a permit will be issued in quadruplicate. One copy of the permit will be furnished to the applicant, to be retained by him for presentation on the arrival of the imported potatoes to the customs officer at the port of entry named in the permit, one copy will be mailed to the collector at the port of entry, one to the inspector of the Department of Agriculture, and the fourth filed with the application. The beginning of the period for which a permit will be valid will be expressed in the permit. All permits will expire on the 30th day of June next after they become valid.

Permits for the entry of potatoes may be refused and existing permits may be canceled on proof that the certificate of inspection does not correctly give the locality where the potatoes were grown, character of the shipment as to freedom from disease or insect infestation, or that the containers have been previously used for the shipment of potatoes.

Permits for the entry of potatoes will be addressed to the collector of customs at the port of entry in the following form:

UNITED STATES DEPARTMENT OF AGRICULTURE,
FEDERAL HORTICULTURAL BOARD,
WASHINGTON, D. C.

PERMIT TO IMPORT POTATOES.

Valid _____, 19__, to June 30, 19__

_____, 19__.

To the Collector of Customs, _____

You are hereby authorized, so far as the jurisdiction of the Department of Agriculture is concerned, to permit the entry, under the plant quarantine act, approved August 20, 1912, of the potatoes described herein upon receipt of

notice in writing from an inspector of the Department of Agriculture that such potatoes have been inspected by him or under his direction and found or believed to be free from injurious potato diseases and insect pests, provided the invoice of each shipment is accompanied by an original certificate issued by a duly authorized official of the country from which the shipment is made and each container bears a copy of this certificate, in conformity with regulation 5.

Quantity.	Probable date of shipment.
.....	.....
.....	.....
.....	.....
.....	.....

Name and address of exporter_____
Country and locality where grown_____
Name and address of importer_____
Respectfully,

HENRY C. WALLACE,
Secretary of Agriculture.

Countersigned:

_____
Chairman of Board.

_____
Permit Clerk.

Regulation 5. Foreign certificate of inspection.

Each certificate shall give the number of the permit; the date of inspection; name and address of the exporter; the district or locality and the country where grown; name and address of consignee; a statement that the potatoes were grown in a district free from infection with potato wart and have been certified by a duly authorized official to be free from potato wart and other injurious potato diseases and insect pests, and that they are contained in bags, boxes, barrels, or other containers that have not previously been used for potatoes, except as to bulk shipments. The original certificate shall be signed and sealed by a responsible inspection official for the country of origin. The copy certificate may be entirely printed, including the seal. The form of such certificate shall be as follows:

To whom it may concern:

This is to certify that the potatoes included in this shipment as per invoice attached, shipped under permit No. _____, consigned to_____
(Name and address of consignee.)
shipped by _____, were grown in _____
(Name and address of exporter.)
_____, a district free from infection with
(District or locality and country.)
potato wart, are contained in bags, boxes, barrels, or other containers, except as to bulk shipments, not previously used for potatoes, and were certified by _____, _____, to be free from potato
(Name of inspector.) (Date and year.)
wart and other injurious potato diseases and insect pests.

[SEAL.] (Signed) _____,
_____
(Title of official inspector.)

Permits may be canceled and further permits refused for the importation of potatoes from any country whenever such potatoes, in the judgment of the Federal Horticultural Board, are found to be so infested as plainly to indicate that the foreign inspection is merely perfunctory.

Lists of officials in foreign countries authorized to inspect potatoes, giving their names and official designations, will be furnished to collectors of customs through the Secretary of the Treasury.

Regulation 6. Notice of arrival of potatoes by permittee.

Immediately upon arrival and before unloading from the vessel or other carrier the permittee shall notify the Secretary of Agriculture, on forms provided for that purpose, stating the number of permit, the quantity of potatoes included in the shipment, the country and locality where grown, the name and address of exporter or shipper, the port of departure, the date of arrival, and the name of the ship or vessel if transported by water, and the designation of the dock where the potatoes are to be landed, and, if by rail, the name of the railroad company, the car numbers, and the terminal where the potatoes are to be unloaded. If the destination of the car is changed en route the permittee shall immediately notify the Secretary of Agriculture of the final destination.

At the same time a copy of the notice to the Secretary of Agriculture shall be sent by the permittee to the duly authorized inspector of the department at the port of entry designated in the permit.

Permits may be canceled and other permits refused if the permittee fails to give either of said notices or gives a false notice.

Lists of such inspectors and officers may be ascertained from the collector of customs or the Federal Horticultural Board, Washington, D. C.

Regulation 7. Special provision for the importation of potatoes from foreign countries into Hawaii and Porto Rico, and from the Dominion of Canada and Bermuda, and the States of Chihuahua and Sonora, Mexico, into the United States.

Potatoes from any foreign country may be imported into the Territories of Hawaii and Porto Rico for local use only, free of any restrictions whatsoever, until otherwise ordered, under the plant quarantine act of August 20, 1912.

Potatoes may be imported from the Dominion of Canada and Bermuda into the United States or any of its Territories or districts, free of any restrictions whatsoever until otherwise ordered, under the plant quarantine act of August 20, 1912.

Potatoes may be imported from the States of Chihuahua and Sonora, Mexico, into the United States, subject only to the following conditions and restrictions, which must be strictly observed and complied with:

(*a*) Persons contemplating the importation of potatoes from the States of Chihuahua and Sonora, Mexico, shall first make application for a permit in the manner and form as prescribed in regulation 3, and upon approval by the Secretary of Agriculture of such application a permit will be issued.

(*b*) Importations from the States of Chihuahua and Sonora, Mexico, will be permitted entry only through the ports of El Paso, Tex., and Douglas, Naco, and Nogales, Ariz., respectively.

(*c*) The requirements contained in regulation 6 in regard to the sending of notice of arrival of shipment shall be complied with by the permittee.

(*d*) No shipment of potatoes from the States of Chihuahua and Sonora, Mexico, will be permitted entry until it has been examined by an inspector of the United States Department of Agriculture and found, or believed to be, free from dangerous potato diseases and insect pests.

The above regulations are hereby adopted and shall be effective on and after March 1, 1922, and shall supersede the regulations governing the importation of potatoes into the United States, which were promulgated to take effect on and after March 1, 1921.

HENRY C. WALLACE,
Secretary of Agriculture.

FEBRUARY 28, 1922.

FORM FOR IMPORTER'S OR BROKER'S REPORT TO THE DEPARTMENT OF AGRICULTURE.

In compliance with section 2 of the plant quarantine act of August 20, 1912, and regulation 6 of the regulations governing the importation of potatoes into the United States, the information provided for in this blank must be given by the permittee or his representative to the Secretary of Agriculture, Washington, D. C., immediately upon arrival of the potatoes and before such potatoes are unloaded from the vessel or other carrier.

At the same time a copy of the notice to the Secretary of Agriculture shall be sent by the permittee to the duly authorized inspector of the department at the port of entry designated in the permit.

HENRY C. WALLACE,
Secretary of Agriculture.

_____, 19__

The Federal Horticultural Board, Washington, D. C.:

The following potatoes, imported under Permit No. _____, shipped from _____
(Port of departure.)

consigned to _____
(Name of importer or broker at port of entry.)

_____ arrived _____, 19__,
(Port of entry.)

on _____ dock _____
(Name of vessel and steamship line.)

or _____
(Name of railroad company.) (Car number.) (Location of terminal.)

Country and locality where grown _____

Foreign shipper _____
(Name and address.)

Quantity.	Nature of containers (sacks, boxes, etc.).
.....	.....
.....	.....
.....	.....
.....	.....

.....
(Name of importer or broker at port of entry.)

.....
(Address.)

ONLY DISEASE-FREE COUNTRIES MAY SEND POTATOES TO UNITED STATES.

(Press notice.)

MARCH 20, 1922.

Under a revision of its regulations now effective the Federal Horticultural Board, United States Department of Agriculture, permits the importation of potatoes only from countries free from potato wart or other injurious potato diseases and insect pests new to or not widely distributed in the United States. This change, which was made in regulation 2, does not involve any restrictions not hitherto enforced on the entry of foreign potatoes, it is pointed out.

In making the change the board took the stand that it was not desirable to permit the entry of potatoes from any district of any country which is known to be invaded as to other districts by the potato wart or other dangerous potato pests. The potato wart, it was held, is so insidious a disease that certification

of freedom of a province or district of an invaded country would always be open to reasonable doubt.

For this reason, in the administration of the potato quarantine and regulations, no permits have been issued for the importation of potatoes except as to countries believed to be entirely free from this disease. Need was felt for having this limitation clearly indicated in the regulation.

AMENDMENT NO. 1 TO REGULATIONS GOVERNING THE IMPORTATION OF POTATOES INTO THE UNITED STATES (REVISED).

(Effective on and after June 20, 1922.)

Under authority conferred by the plant quarantine act of August 20, 1912 (37 Stat. 315), it is ordered that regulation 7 of the regulations supplemental to the order of the Secretary of Agriculture, issued December 22, 1913, governing the importation of potatoes into the United States, be, and the same is hereby, amended to read as follows:

Regulation 7. Special provision for the importation of potatoes from foreign countries into Hawaii and Porto Rico, and from the Dominion of Canada and Bermuda, the States of Chihuahua and Sonora, and the Imperial Valley of the State of Lower California, Mexico, into the United States.

Potatoes from any foreign country may be imported into the Territories of Hawaii and Porto Rico for local use only, free of any restrictions whatsoever, until otherwise ordered, under the plant quarantine act of August 20, 1912.

Potatoes may be imported from the Dominion of Canada and Bermuda into the United States or any of its Territories or districts, free of any restrictions whatsoever, until otherwise ordered, under the plant quarantine act of August 20, 1912.

Potatoes may be imported from the States of Chihuahua and Sonora, and the Imperial Valley of the State of Lower California, Mexico, into the United States, subject only to the following conditions and restrictions, which must be strictly observed and complied with:

(*a*) Persons contemplating the importation of potatoes from the States of Chihuahua and Sonora, and the Imperial Valley of the State of Lower California, Mexico, shall first make application for a permit, in the manner and form as prescribed in regulation 3, and upon approval by the Secretary of Agriculture of such application a permit will be issued.

(*b*) Importations from the States of Chihuahua and Sonora, Mexico, will be permitted entry only through the ports of El Paso, Tex., and Douglas, Naco, and Nogales, Ariz., respectively.

(*c*) Importations from the Imperial Valley of the State of Lower California, Mexico, will be permitted entry only through the port of Calexico, Calif.

(*d*) The requirements contained in regulation 6 in regard to the sending of notice of arrval of shipment shall be complied with by the permittee.

(*e*) No shipment of potatoes from the States of Chihuahua and Sonora, and the Imperial Valley of the State of Lower California, Mexico, will be permitted entry until it has been examined by an inspector of the United States Department of Agriculture and found, or believed to be, free from dangerous potato diseases and insect pests.

This amendment is hereby adopted and shall be effective on and after June 20, 1922.

Done at the city of Washington this 19th day of June, 1922.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.]

HENRY C. WALLACE,
Secretary of Agriculture.

Ban Removed Against Potatoes From Imperial Valley, Mexico.

(Press notice.)

June 28, 1922.

Entry into the United States of potatoes grown in the Imperial Valley of Lower California, Mexico, is permitted in a modification of the Federal quarantine regulations effective June 20. The Federal Horticultural Board of the United States Department of Agriculture, which administers the quarantine law, recently received a request for a permit authorizing the importation of potatoes from that region. Under the regulations then in force permission could not be granted.

A sample lot of the potatoes, which it was desired to ship into this country, was examined by an inspector of the board stationed at Calexico, Calif. He reported that they appeared to be free of disease. It was also represented that while a total of only 20 acres was planted to potatoes in the Mexican part of the valley this year a larger acreage probably will be planted next year.

Under the new regulations potatoes from the Imperial Valley may come into the United States only through the port of Calexico, Calif. Persons intending to make importations must first apply to the Federal Horticultural Board, Department of Agriculture, Washington, D. C., for a permit. All shipments, however, must be examined by a Government inspector to see that they are free of dangerous potato diseases and insect pests.

NOTICE OF PUBLIC HEARING TO CONSIDER THE ADVISABILITY OF PROHIBITING THE ENTRY OF SAND, SOIL, OR EARTH FROM THE TERRITORIES OF PORTO RICO AND HAWAII.

January 17, 1922.

The Secretary of Agriculture has information that dangerous insect pests, including *Phyllophaga* spp. (white grubs), *Phytalus* sp., *Adoretus umbrosus* var. *tenuimaculatus* (Japanese rose beetle), and several species of termites new to and not heretofore widely prevalent or distributed within and throughtout the continental United States exist in the Territories of Porto Rico and Hawaii, and that there is danger of introducing these and other insects in sand, soil, or earth with plants or otherwise from the Territories named.

It appears necessary, therefore, to consider the advisability of quarantining the Territories of Porto Rico and Hawaii in accordance with the plant quarantine act of August 20, 1912 (37 Stat. 315), as amended by the act of Congress approved March 4, 1917 (39 Stat. 1134, 1165), and to prohibit the movement from these Territories to the continental United States of sand, soil, or earth, with plants or otherwise.

If such quarantine action is taken it will involve the inspection by inspectors of the Federal Horticultural Board at mainland ports of arrival particularly of plants to determine freedom from sand, soil, or earth.

Notice is therefore hereby given that a public hearing will be held at the Department of Agriculture, Washington, D. C., Room 11, Federal Horticultural Board, at 10 o'clock a. m. March 7, 1922, in order that any person interested in the proposed quarantine may appear and be heard, either in person or by attorney.

HEARING TO CONSIDER PROHIBITING ENTRY OF SAND, SOIL, OR EARTH IN CONNECTION WITH PLANTS OR OTHERWISE.

(Press notice.)

JANUARY, 1922.

To prevent the possible importation of certain dangerous plant insect pests into the United States from Porto Rico and Hawaii, a public hearing to consider the need for prohibiting the entry of sand, soil, or earth in connection with plants or otherwise from these Territories into this country will be held here by the Federal Horticultural Board of the United States Department of Agriculture, March 7 at 10 o'clock. Any person interested in the proposed quarantine may appear and be heard either in person or by attorney.

A quarantine of this kind, it is pointed out, particularly as it affected soil attached to plants, would not entail any serious restrictions on the commerce of either Porto Rico or Hawaii with the mainland. It would give an opportunity for the port inspectors of the board to stop any occasional or accidental shipments of earth with plants, or otherwise, which might be the means of bringing into this country undesirable plant enemies hibernating or living in the soil.

Among the insects against which the quarantine would be aimed are white grubs, the Japanese rose beetle, and several species of termites. All these are new to the mainland but exist in the Territories and can be readily carried in soil.

THE STATE OF UTAH PROVIDES FOR INSPECTION OF MAIL SHIPMENTS OF PLANTS AND PLANT PRODUCTS.

POST OFFICE DEPARTMENT,
THIRD ASSISTANT POSTMASTER GENERAL,
Washington, May 8, 1922.

The State of Utah has established places for the terminal inspection, under the provisions of the act of March 4, 1915, embodied in section 478¼, Postal Laws and Regulations, of the following plants and plant products:

"All florists' stock, trees, shrubs, vines, cuttings, grafts, scions, buds, fruit pits and other seeds of fruit and ornamental trees or shrubs, and other plants and plant products in the raw or unmanufactured state, except vegetable and flower seeds: *Provided*, That this list of plants and plant products shall not apply to plants and plant products shipped under the certification of the Federal Horticultural Board of the United States Department of Agriculture."

All postmasters are therefore informed that packages containing any plants or plant products addressed to places in the State of Utah may be accepted for mailing only when plainly marked so that the contents may be readily ascertained by an inspection of the outside thereof. The law makes the failure so to mark such parcels an offense punishable by a fine of not more than $100.

Postmasters within the State of Utah shall be governed strictly by the provisions of paragraphs 3, 4, 5, and 6, section 478¼, Postal Laws and Regulations, in the treatment of all packages addressed for delivery at their offices containing any of the plants or plant products above described as subject to terminal inspection.

Inspection service is maintained at the places in Utah named below, and all postmasters in that State shall, after receiving the required postage therefor, under the provisions of section 478¼, Postal Laws and Regulations, send to the nearest inspection point each package containing plants or plant products subject to terminal inspection: Brigham City, Delta, Farmington, Heber, Logan, Ogden, Price, Provo, Salt Lake City.

Owing to the perishable character of plants and plant products the packages containing such matter must be given prompt attention.

Any failure of compliance with the foregoing instructions or with the provisions of section 478¼, Postal Laws and Regulations, coming to the attention of any postmaster should be reported to the Third Assistant Postmaster General, Division of Classification.

W. Irving Glover,
Third Assistant Postmaster General.

INSTRUCTIONS TO CUSTOMS OFFICIALS.

MAIL IMPORTATIONS OF BROOM CORN, NURSERY STOCK, PLANTS, AND SEEDS PROHIBITED.

The following letter was sent to the customs officers located at the ports named in article 300 of the Customs Regulations of 1915, which have been designated as ports for the examination of mail packages:

Treasury Department,
Office of the Secretary,
Washington, May 12, 1922.

The Collector of Customs, _____

Sir: The department has been advised by the Department of Agriculture that there have been several recent importations through the mails of samples of broom corn, some of which it appears were infested with larvæ of the European corn borer.

At the request of the Department of Agriculture your attention is invited to T. D. 38348 of April 1, 1920, from which it will be seen that the importation of broom corn is prohibited except upon compliance with the regulations. Attention is also invited to articles 331 and 489 of the Customs Regulations of 1915, prohibiting the importation of all nursery stock, plants, and seeds of any character through the mails.

You are hereby directed to issue instructions to customs officers handling mail packages at your port to exercise the utmost vigilance in order that the importation of nursery stock, plants, seeds, etc., through the mails may be prevented.

Packages containing such articles received in the mail should be immediately turned over to the post office of receipt for return to the country of origin, as provided in article 489 of the Customs Regulations.

Respectfully,

E. W. Camp,
Chief, Division of Customs.

INSTRUCTIONS TO POSTMASTERS.

REVISION OF JAPANESE BEETLE QUARANTINE (NO. 48).

Postmaster, _____.

January 23, 1922.

My Dear Sir: Inclosed for your information and guidance, under the provisions of section 478, P. L. and R., is a copy of Quarantine No. 48 (Revised), issued by the Secretary of Agriculture, effective January 1, 1922, quarantining certain areas in the States of New Jersey and Pennsylvania for the Japanese beetle. The quarantined territory is divided into two sections, one being designated as *heavily* infested and the other as *lightly* infested.

The *heavily* infested area in the State of New Jersey consists of the townships of Palmyra, Cinnaminson, Delran, Riverside, Chester, Mount Laurel, Northampton, Evesham, Lumberton, Westhampton, Burlington, Willingboro, and Beverly, in Burlington County; the city of Camden, the townships of Pensauken, Delaware, Haddon and Center, and the borough of Magnolia, in Camden County; and in the State of Pennsylvania wards 45, 23, 35, and 41 in the city of Philadelphia, in Philadelphia County; and the townships of Bensalem and Bristol in Bucks County.

The *lightly* infested area in the State of New Jersey consists of the townships of Florence, Springfield, Easthampton, Medford, and Southampton, in Burlington County; the townships of Gloucester, Voorhees, Clementon, and Berlin in Camden County; and the townships of West Deptford and Deptford, in Gloucester County; and in the State of Pennsylvania, wards 33 and 42 of the city of Philadelphia, in Philadelphia County; the townships of Cheltenham, Abington, and Moreland, in Montgomery County; and the townships of Southampton and Middletown, in Bucks County.

From the *heavily* infested area (1) sweet, green, or sugar corn, grapes, lettuce, cabbage, and forage crops of all kinds, including hay and straw; (2) nursery, ornamental, and greenhouse stock and all other plants except bulbs and cut flowers; and (3) soil, compost, and manure other than fresh manure shall not be moved or allowed to be moved interstate to any point outside the infested area quarantined for the Japanese beetle unless and until such articles have been inspected by the United States Department of Agriculture and certified to be free from the Japanese beetle: *Provided*, That in the case of sweet, green, or sugar corn, grapes, lettuce, and forage crops of all kinds, including hay and straw, this quarantine and these regulations shall apply for the period between June 15 and October 15; in the case of all other products, throughout the year.

From the *lightly* infested area (1) nursery, ornamental, and greenhouse stock, and all other plants except bulbs and cut flowers; and (2) soil, compost, and manure other than fresh manure shall not be moved or allowed to be moved interstate to any point outside the infested area quarantined for the Japanese beetle unless and until such articles have been inspected by the United States Department of Agriculture and certified to be free from the Japanese beetle. This requirement applies throughout the year.

It will be observed from regulation 6 that each parcel or container shall bear the prescribed certificate of inspection, or if shipped under a permit issued by an inspector of the United States Department of Agriculture a copy of such permit must be affixed to the outside thereof.

This notice of quarantine supersedes Notice of Quarantine No. 48, as amended, promulgated September 30, 1920.

Sincerely yours,

W. Irving Glover,
Third Assistant Postmaster General.

REVISION OF EUROPEAN CORN BORER QUARANTINE (NO. 43).

January 24, 1922.

Postmaster, _____

My Dear Sir: Inclosed for your information and guidance under the provisions of paragraph 1, section 478, P. L. and R., is a copy of Quarantine Order No. 43 (Revised), issued under authority of the plant quarantine act by the Secretary of Agriculture on October 29, 1921, effective on and after November 15, 1921. This order quarantines the States of New Hampshire, Massachusetts, New York, Pennsylvania, Michigan, and Ohio on account of the European corn

borer (*Pyrausta nubilalis* Hubn.), and prohibits the movement from the infested areas in those States of the plants and plant products mentioned in the order unless and until such plants and plant products shall have been inspected by the United States Department of Agriculture and certified to be free from the corn borer, or they are shipped under a permit issued by an inspector of the United States Department of Agriculture authorizing their movement, a copy of such certificate or permit to be affixed to the outside of the parcels or containers.

The infested areas are located as follows: Rockingham County, *New Hampshire;* Barnstable, Bristol, Essex, Middlesex, Norfolk, Plymouth, and Suffolk Counties, *Massachusetts;* Albany, Cattaraugus, Chautauqua, Erie, Fulton, Hamilton, Montgomery, Niagara, Rensselaer, Saratoga, Schenectady, Schoharie, Washington, and Warren Counties, *New York;* Erie County, *Pennsylvania;* Monroe County, *Michigan;* and Ashtabula, Cuyahoga, Erie, Lake, Lorain, Lucas, and Ottawa Counties, *Ohio.*

The following plants and plant products are subject to the restrictions of the quarantine order:

(1) Corn and broom corn (including all parts of the stalk), all sorghums, and sudan grass, from all infested areas, throughout the entire year.

(2) Cut flowers or entire plants of chrysanthemum, aster, cosmos, zinnia, hollyhock, and cut flowers or entire plants of gladiolus and dahlia, except the bulbs thereof, without stems, from infested areas in Massachusetts and New Hampshire, throughout the entire year.

(3) Celery, green beans in the pod, beets with tops, spinach, rhubarb, and oat and rye straw as such or when used as packing, from infested areas in Massachusetts and New Hampshire, between June 1 and December 31.

The quarantine order does not apply to the movement by the United States Department of Agriculture of the products named for experimental or scientific purposes.

Under the provisions of paragraph 1, section 478, P. L. and R., the acceptance for mailing of the plants and plant products referred to from the infested areas designated in the quarantine order is subject to the restrictions of that order.

Sincerely yours,

W. Irving Glover,
Third Assistant Postmaster General.

SATIN MOTH QUARANTINE (NO. 53).

February 17, 1922.

Postmaster, _____

My Dear Sir: Inclosed for your information and guidance, under the provisions of section 478, P. L. and R., is a copy of Quarantine Order No. 53, issued by the Secretary of Agriculture, effective January 1, 1922, quarantining certain areas in the States of New Hampshire and Massachusetts for the satin moth.

It will be noted that the order absolutely prohibits the movement from the infested areas of any species or variety of poplar or willow.

Sincerely yours,

W. Irving Glover,
Third Assistant Postmaster General.

INSPECTION AUTHORIZED EN ROUTE OF PARCEL-POST PACKAGES OF PLANT MATERIAL TO DETECT VIOLATIONS OF BLISTER-RUST QUARANTINES.

FEBRUARY 27, 1922.

POSTMASTER, *Bellingham, Wash.*

MY DEAR SIR: It appears from information received from the chairman of the Federal Horticultural Board of the United States Department of Agriculture that plant material may be shipped from and to your post office in violation of quarantines established under the plant quarantine act of August 20, 1912, embodied in section 478, Postal Laws and Regulations, particularly with respect to Quarantine Order No. 26, pertaining to the white-pine blister rust.

In view of this you are requested to cooperate with the inspectors of the Department of Agriculture and permit them to inspect parcel-post packages mailed or received at your post office labeled as containing nursery stock or which obviously contain plant material, but no others. Such inspection is to be made so as not to interfere with the prompt handling of parcel-post packages. Packages in mail bags which are not opened at your office may not be so inspected.

The inspectors will present proper credentials, to consist of Department of Agriculture identification cards bearing the official seal of that department and countersigned by the inspector, and also an authorization from the chairman of the Federal Horticultural Board of the Department of Agriculture bearing the inspector's photograph.

When duly authorized inspectors discover parcels in the mails containing plants, the movement of which is prohibited by Quarantine Order No. 26, they will call particular attention to that fact and you will then indorse the parcels: "Contains plants shipped in violation of the white-pine blister rust quarantine," and (after crossing out the name and address of the addressees) immediately return them to the senders.

Since parcels of this character were unmailable, and therefore were erroneously accepted and dispatched, they may be returned without additional charge for postage. In such cases a report should be made to this office giving the names and addresses of the sender and addressee and the facts as to the character of the contents making the parcel unmailable under the quarantine order referred to.

See inclosed circular of this office relating to the subject.

Sincerely yours,

W. IRVING GLOVER,
Third Assistant Postmaster General.

[Similar letters sent later to postmasters at Spokane and Seattle, Wash.]

MARCH 21, 1922.

POSTMASTER, _____.

MY DEAR SIR: Referring to the letter addressed to you by this office under date of February 27 last in regard to the inspection of parcel-post matter mailed or received at your post office labeled as containing nursery stock, or which obviously contains plant material, with particular reference to the enforcement of Quarantine Order No. 26, issued by the United States Department of Agriculture, for the white-pine blister rust, your attention is invited to the inclosed copy of Order No. 54 (effective March 15, 1922), issued by that department, quarantining certain counties in the State of Washington on account of the white-pine blister rust.

The instructions in the letter of February 27 likewise apply to parcels of plant material originating in the infested areas described in Quarantine Order No. 54.

Please be governed accordingly.

Sincerely yours,

W. IRVING GLOVER,
Third Assistant Postmaster General.

BLISTER-RUST QUARANTINE (NO. 54).

POSTMASTER, _____. MARCH 27, 1922.

MY DEAR SIR: Inclosed for your information and guidance under the provisions of section 478, P. L. and R., is a copy of Quarantine Order No. 54, issued by the Secretary of Agriculture, effective March 15, 1922, quarantining certain counties in the State of Washington for the white-pine blister rust.

Under this order the movement of any of the plants or plant products enumerated from the areas designated as infested is absolutely prohibited and, under the provisions of paragraph 1, section 478, P. L. and R., you should refuse to accept for mailing parcels containing any of the plants or plant products declared to be unmailable by the order.

Sincerely yours,

W. IRVING GLOVER,
Third Assistant Postmaster General.

IMPORTATION OF COTTON THROUGH THE MAILS.

WASHINGTON, *June 23, 1922.*

It is claimed that, notwithstanding the existing prohibition, samples of cotton are being brought to the United States from Canada without compliance with the cotton regulations of this country.

As all mail importations of cotton, even if the cotton is alleged to be of American origin, are prohibited, except the cotton is addressed for delivery to the Office of Foreign Seed and Plant Introduction, United States Department of Agriculture, Washington, D. C., all exchange post offices and railway post offices are cautioned to use care in the distribution of mail articles from Canada in order that any attempted evasions of the prohibition may be rendered unsuccessful and the mail articles returned to origin as containing a prohibited commodity.

E. R. WHITE,
Acting Second Assistant Postmaster General.

SHIPMENT OF MEXICAN CITROUS FRUIT IN BOND THROUGH THE UNITED STATES.

HB–147.

APRIL 13, 1922.

The importation for consumption purposes of citrous and certain other fruit from Mexico is prohibited by Quarantine Order No. 5, issued under the authority of the Federal plant quarantine act, to prevent the entry into the United States of an injurious insect known as the Mexican fruit fly (*Trypeta ludens*).[1]

[1] The Federal plant quarantine act of Aug. 20, 1912, provides either for regulation or prohibition of the entry of plants and plant products when such action shall be necessary to prevent the introduction into the United States of injurious insects and plant diseases. Under this authority citrous fruit from Mexico, including oranges, grapefruit, and sweet limes, and also mangoes, achras sapotes, peaches, guavas, and plums are prohibited entry into the United States on account of the Mexican fruit fly (*Trypeta ludens*).

With respect to articles prohibited entry in this and also in other similar quarantines promulgated for the purpose of excluding plant pests, provision has been made for the entry under permit, either for immediate export or for immediate transportation and exportation in bond, of such articles, when such action can be taken without risk to the fruit or other cultures of the United States. These provisions are embodied in rules and regulations promulgated by the Secretary of Agriculture July 7, 1920. The provisions for entry for immediate transportation and exportation in bond of such prohibited articles are given in section 7 of those regulations, as follows:

The entry for immediate transportation and exportation in bond of any of the plants or plant products described in these regulations, or which may hereafter be excluded by quarantine, is prohibited except on specific permit from the Secretary of Agriculture under such conditions as will be prescribed in the permit, when it can be shown that such transportation in bond through the United States can be so safeguarded as to routing and protection of shipment as to eliminate all possibility of risk to the plant cultures of this country.

Conditions Governing Rail Shipment in Bond of Citrous Fruit Produced in the State of Sonora, Mexico.

Under this section permits will be issued authorizing the entry for immediate transportation and exportation in bond of Mexican citrous fruit produced in the State of Sonora only, under conditions which will be incorporated in the permits. These conditions are as follows:

(1) The exporter of citrous fruit must first secure from the Federal Horticultural Board a permit authorizing shipment. A separate permit will be required for each port of entry and country of destination, but each permit will be an open permit continuing until revoked and valid over all the designated routes.

(2) Such movement will be limited to entry through the ports of Nogales and Naco, Ariz., and movement through the United States by designated routes to Canada or back into Mexico at ports not farther east than El Paso. The authorized railroad routes for such movement are listed at the end of this circular.

(3) As a condition of such movement the fruit must be shipped in bond under United States customs seal in refrigerator cars, and may not be transshipped en route.

(4) Prior to entry the exporter must submit to the collector of customs at the port of entry a notice, in duplicate, on forms provided for the purpose, stating the initials and number of the railroad car, the particular authorized route over which it is proposed that the car shall move, and the port on the Canadian or Mexican border at which the car will pass out of the United States.

(5) Before entry each car must be disinfected in such manner as shall be required by the inspector of the Federal Horticultural Board.

(6) After the shipment has reached destination and been discharged, either in Canada or Mexico, the car conveying it, as a condition of return to the United States, must be carefully swept and freed from all boxes, fruit, or other rubbish by the railroad company involved.

Failure to comply with any of the above requirements may cause the cancellation of the permit.

Conditions Governing Movement in Bond to Canada of Mexican Fruits Through Northern Ports.

In addition to the rail movement from the Mexican border ports of citrous fruit produced in the State of Sonora, Mexico, under the conditions set forth above, citrous fruit and also other quarantined Mexican fruits from any part of

Mexico coming to the port of New York or other northern Atlantic port by ocean transit will be permitted entry at such ports for immediate transportation and exportation in bond to Canada under a modification of the conditions enumerated above. The following requirements must, however, be met:

A separate permit must be secured for each shipment, and the fruit must be shipped in bond but not necessarily in refrigerator cars. Any direct route to Canada will be authorized in the permit. No disinfection will be required as a condition of entry and movement, but the cleaning of the cars at destination in Canada by the railroad company involved prior to reentry into the United States will be required.

Railroad routes authorized for the movement of Sonoran citrous fruit directly from Mexico to Canada or back into Mexico.

FROM SONORA, MEXICO, TO CANADA IN BOND THROUGH THE UNITED STATES.

(To determine the authorized routes start with Nogales, Ariz., and for each junction point refer to the first column for the next route, continuing until the border is finally reached; e. g., Nogales, Ariz., via Southern Pacific, to El Paso, Tex.; El Paso, Tex., via Atchison, Topeka & Santa Fe., to Denver, Colo.; Denver, Colo., via Union Pacific, to Seattle, Wash.; Seattle, Wash., via Great Northern, to Vancouver, B. C. It will be noted that alternative routings between certain points are provided for.)

From—	Via—	To—
Nogales, Ariz	Southern Pacific	El Paso, Tex.
	do	Rio Grande, N. Mex.
El Paso, Tex	Atchison, Topeka & Santa Fe	Denver, Colo.
	Chicago, Rock Island & Pacific	Do.
	Texas & Pacific	Fort Worth, Tex.
	El Paso & Southwestern	Tucumcari, N. Mex.
	Galveston, Harrisburg & San Antonio	Alpine, Tex.
	do	San Antonio, Tex.
	El Paso & Southwestern	Santa Rosa, N. Mex.
Rio Grande, N. Mex	Galveston, Harrisburg & San Antonio	San Antonio, Tex.
	do	Alpine, Tex.
Santa Rosa, N. Mex	Rock Island	Chicago, Ill.
Denver, Colo	Union Pacific	Seattle, Wash.
	do	Spokane, Wash.
Seattle, Wash	Great Northern	Vancouver, B. C.
	Northern Pacific	Do.
Spokane, Wash	Spokane Falls & Northern	Do.
Fort Worth, Tex	Missouri, Kansas & Tex	Kansas City, Mo.
Tucumcari, N. Mex	Chicago, Rock Island & Pacific	Chicago, Ill.
Alpine, Tex	Kansas City, Mexico & Orient Ry. of Texas and Kansas City, Mexico & Orient R. R.	Wichita, Kans.
San Antonio, Tex	Missouri, Kansas & Texas	St. Louis, Mo.
	do	Kansas City, Mo.
St. Louis, Mo	Direct route to Chicago	Chicago, Ill.
Chicago, Ill	Grand Trunk	Sarnia, Canada.
	do	Windsor, Canada.
	do	Port Huron, Mich.
	Wabash	Detroit, Mich.
Wichita, Kans	Missouri Pacific	Kansas City, Mo.
Kansas City, Mo	Chicago, Burlington & Quincy	St. Paul, Minn.
	Rock Island	Chicago, Ill.
	Chicago & Alton	Do.
	Wabash	Detroit, Mich.
	Chicago & Great Western	St. Paul, Minn.
	Chicago, Milwaukee & St. Paul	Do.
	Chicago, Rock Island & Pacific	Do.
Port Huron, Mich	Grand Trunk	Sarnia, Canada.
Detroit, Mich	Canadian Pacific	Windsor, Canada.
St. Paul, Minn	Soo Line	Portal, N. Dak.
	do	Noyes, Minn.

FROM SONORA, MEXICO, TO MEXICO IN BOND THROUGH THE UNITED STATES

Naco, Ariz	El Paso & Southwestern	Douglas, Ariz.
Nogales, Ariz	Southern Pacific	Rio Grande, N. Mex
Douglas, Ariz	Nacozari R. R.	Nacozari, Sonora, Mexico.
Rio Grande, N. Mex	Galveston, Harrisburg & San Antonio	El Paso, Tex.
El Paso, Tex	Mexico, N. W.	Cuidad Juarez, Chihuahua, Mexico.

C. L. MARLATT,
Chairman Federal Horticultural Board.

MEMORANDUM REGARDING USE OF THE TELEGRAPH.

FEBRUARY 20, 1922.

Attention is called to the necessity for always sending telegrams at the cheapest possible rate. Telegrams which need not be delivered until the next morning, or telegrams which, because of the lateness of the hour at which they are dispatched, will not be delivered until the following morning, should be marked "Night letter" or "Night message," whichever is found to be the cheaper after considering the number of words and the different rates. Long telegrams of 50 words, more or less, should be sent as night *letters*, while shorter telegrams which are to be delivered the next day should be sent as night *messages*. On night *letters* the telegraph company allows a minimum charge for the first 50 words with an increase on each 10 words thereafter, while for night *messages* the minimum charge is for the first 10 words with an additional charge per word thereafter.

In the case of day messages where it is desired that the telegram be delivered at some time during the day, but where it is not necessary that it be delivered immediately, the day-letter rate should be taken advantage of. At the day-letter rate there is a minimum charge for the first 50 words with an additional charge for each 10 words thereafter.

The auditor is now taking exception to various telegraph charges where the cheapest rate has not been used and you are therefore cautioned to consider these matters in the use of the telegraph.

Respectfully,

R. C. ALTHOUSE,
Assistant to the Chairman.

CONVICTIONS FOR VIOLATIONS OF THE PLANT QUARANTINE ACT.

The following convictions for violations of the plant quarantine act were reported to the board during the period January 1 to June 30, 1922:

Sweet-potato and yam quarantine.—In the case of the United States *v.* Y. Di Cristina, in the shipment from Mayaguez, P. R., to New York, N. Y., of 24 barrels of yams (*Dioscorea* sp.) which appeared on the manifests as "Eddoes," the defendant pleaded guilty and was sentenced to pay a fine of $10 and costs. (Plant Quarantine Case No. 122.)

Gipsy moth and brown-tail moth quarantine.—In the case of the United States *v.* Percy A. Bowden, Bangor, Me., in the shipment, interstate, from the area quarantined for the gipsy moth to a point outside of that area, without inspection and certification, of one fir Christmas tree, the defendant, on February 10, 1922, pleaded nolo contendere and was sentenced to pay a fine of $5. (Plant Quarantine Case No. 55.)

White pine blister rust quarantine.—In the case of the United States *v.* Storrs & Harrison Co., Painesville, Ohio, in the interstate shipment of currant and gooseberry plants to points outside of the quarantined area, the defendant pleaded nolo contendere and was fined $12.50 on each of eight counts, together with costs. (Plant Quarantine Case No. 87.)

In the case of the United States *v.* the Strand Nurseries, Taylors Falls, Minn., in the interstate shipment of currant plants to a point outside of the quarantined area, the defendant pleaded guilty and was fined $1. (Plant Quarantine Case No. 93.)

In the case of the United States *v.* Bradley Brothers, Makanda, Ill., in the interstate shipment of currant and gooseberry plants to points outside of the

quarantined area, the defendant pleaded guilty and was fined $25 on the first count and $1 each on the second, third, fourth, fifth, sixth, seventh, eighth, ninth, tenth, eleventh, and twelfth counts, with costs. (Plant Quarantine Case No. 99.)

Sugar cane quarantine (foreign).—In the case of the United States *v.* Jose Cruz and Pedro Medina, who were intercepted while crossing the border into the United States from Mexico with approximately 150 stalks of sugar cane, the defendants pleaded guilty and were sentenced to serve 28 days in jail.

LIST OF CURRENT QUARANTINE AND OTHER RESTRICTIVE ORDERS.

There have been few additions and changes in this list since the publication of the July–December, 1921, issue of these announcements, and in this issue the additions and changes only during the period covered, January–June, 1922, are given below:

European corn borer.—Quarantine No. 43 (second revision): Regulates the movement interstate to any point outside of the quarantined area of (1) corn and broom corn (including all parts of the stalk), all sorghums, sudan grass, celery, green beans in the pod, beets with tops, spinach, rhubarb, oat and rye straw as such or when used as packing, cut flowers or entire plants of chrysanthemum, aster, cosmos, zinnia, hollyhock, and cut flowers or entire plants of gladiolus and dahlia, except the bulbs thereof, without stems, from infested areas in Massachusetts and New Hampshire, and (2) corn and broom corn (including all parts of the stalk), all sorghums, and sudan grass from infested areas in New York, Pennsylvania, Ohio, and Michigan, on account of the European corn borer (*Pyrausta nubilalis*).

Japanese beetle.—Quarantine No. 48, revised: Regulates the movement interstate to any point outside of certain portions of the counties of Burlington, Gloucester, and Camden, N. J., and certain portions of the counties of Philadelphia, Montgomery, and Bucks, Pa., of the following articles from the heavily infested area: (1) Sweet, green, or sugar corn, grapes, lettuce, cabbage, and forage crops of all kinds, including hay and straw; (2) nursery, ornamental, and greenhouse stock, and all other plants, except bulbs and cut flowers; and (3) soil, compost, and manure other than fresh manure; and from the lightly infested area, (1) nursery, ornamental, and greenhouse stock, and all other plants except bulbs and cut flowers; and (2) soil, compost, and manure other than fresh manure, on account of the Japanese beetle (*Popillia japonica*).

Pink bollworm.—Quarantine No. 52, with revised rules and regulations: Prohibits the interstate movement from the infested and regulated areas of Texas, Louisiana, and New Mexico of cotton, including all parts of the plant, seed cotton, cotton lint, linters, gin waste and all other forms of cotton lint, cotton seed, cottonseed hulls, cottonseed cake and meal, bagging and other containers of the articles enumerated, and also railway cars, boats, and other vehicles which have been used in conveying cotton and cotton products grown in the infested districts or which are fouled with such products, hay and other farm products, farm household goods, and farm equipment, except as provided in the rules and regulations supplemental thereto, on account of the pink bollworm of cotton (*Pectinophora gossypiella* Saunders).

White-pine blister rust.—Quarantine No. 54: Prohibits the interstate movement from all counties in the State of Washington lying west of the crest of the Cascade Mountains of five-leafed pines, currant and gooseberry plants, on account of the white-pine blister rust.

WASHINGTON : GOVERNMENT PRINTING OFFICE : 1922